

100 105 110

Phe Ala Ile Lys Thr Arg Met Leu Phe Leu Pro Cys Ser Asp Asn Val

115 120 125

<210> 3211

<211> 757

<212> PRT

<213> Homo sapiens

<400> 3211

Met Gln Lys Ser Leu Arg Pro Ile Gly Leu Leu Arg Ala Gln Ser Leu

1 5 10 15

Glu Trp Phe Tyr Asn Asn Val Lys Ser Arg Phe Glu Arg Phe Gly Ser

20 25 30

Ala Lys Val Leu Lys Asn Leu Tyr Arg Lys His Arg Leu Glu Ser Gly

35 40 45

Ala Cys Phe Asp Ile Leu Gly Gly Ser Leu Phe Glu Ser Asn Leu Glu

50 55 60

Asn Glu Gly Ser Ile Ser Gly Ser Asp Ser Thr Phe Tyr Arg Gln Ser

65 70 75 80

Glu Gly His Ser Val Met Asp Thr Leu Ala Val Ala Leu Arg Val Ala

85 90 95

Glu Glu Ala Ile Glu Glu Ala Ile Ser Lys Ala Glu Ala Tyr Gly Asp

100 105 110

Ser Leu Asp Lys Gln Asn Glu Ala Ser Tyr Leu Arg Asp His Lys Glu

115 120 125

Glu Leu Thr Glu Glu Leu Ala Thr Thr Ile Leu Gln Lys Ile Ile Arg

130 135 140

Lys Gln Lys Ser Lys Ser Glu Gln Gln Val Glu Glu Glu Pro Gly Trp
 145 150 155 160
 Pro His Pro Gln Ser Cys Ser Thr Lys Val Ala Asp Glu Gly Thr Ser
 165 170 175
 Ala Ser Pro Gly Gly Tyr Arg Ala Pro Ala Ala Leu Trp Arg Ser Gln
 180 185 190
 Ser Ala Phe Ser Ile Thr Gly Glu Glu Ala Leu Lys Thr Pro Pro Val
 195 200 205
 Glu Ala Pro Ser Arg Gln Pro Arg Asp Gln Gly Gln His Pro Arg Ala
 210 215 220
 Glu Ser Ala Leu Pro Ser Trp Lys Ser Val Asp Arg Leu Asp Glu Thr
 225 230 235 240
 Asn Leu Ala Pro Val Leu Gln Ser Pro Asp Gly Asn Trp Val Ala Leu
 245 250 255
 Lys Asp Gly Ala Pro Pro Pro Thr Arg Leu Leu Ala Lys Pro Lys Ser
 260 265 270
 Gly Thr Phe Gln Ala Leu Glu Val Ala Ser Ser Val Ala Ser Ala Tyr
 275 280 285
 Asp Glu Met Gly Ser Asp Ser Glu Glu Asp Phe Asp Trp Ser Glu Ala
 290 295 300
 Leu Ser Lys Leu Cys Pro Arg Ser Arg Ala Leu Pro Arg Asn Pro Gln
 305 310 315 320
 Pro Gln Pro Thr Gln Ala Gln Ser Ser Asp Gln Gly Pro Ile Ala Ala
 325 330 335
 Ser Pro Ser Ser Ala Leu Ser Pro Asn Pro Glu Ala Met Cys Ser Asp
 340 345 350
 Ser Glu Thr Ser Ser Ala Gly Ser Ser Arg Glu Val Gly His Gln Ala
 355 360 365
 Arg Leu Ser Trp Leu Gln Arg Lys Ala Pro Arg Asn Pro Ala Ala Glu

370	375	380
Lys Met Arg Leu His Gly Glu Leu Asp Val Asn Phe Asn Pro Gln Leu		
385	390	395
Ala Ser Arg Glu Thr Ser Asp Ser Ser Glu Pro Glu Glu Ala Pro His		400
405	410	415
Thr Thr Asp Arg Arg Ala Arg Arg Trp Arg Arg Ala Arg Leu Gly Ser		
420	425	430
Glu Glu Pro Ser Lys Glu Pro Ser Ser Pro Ser Ala Gln Leu Arg Asp		
435	440	445
Leu Asp Thr His Gln Val Ser Asp Asp Leu Ser Glu Thr Asp Ile Ser		
450	455	460
Asn Glu Ala Arg Asp Pro Gln Thr Leu Thr Asp Thr Thr Glu Glu Lys		
465	470	475
Arg Arg Asn Arg Leu Tyr Glu Leu Ala Met Lys Met Ser Glu Lys Glu		480
485	490	495
Thr Ser Ser Gly Glu Asp Gln Glu Ser Glu Pro Lys Thr Glu Ser Glu		
500	505	510
Asn Gln Lys Glu Ser Leu Ser Ser Glu Asp Asn Ser Gln Ser Val Gln		
515	520	525
Glu Glu Leu Lys Lys Phe Ser Ala Val Ser Leu Cys Asn Ile Ser		
530	535	540
Thr Glu Val Leu Lys Val Ile Asn Ala Thr Glu Glu Leu Ile Ala Gly		
545	550	555
Ser Thr Gly Pro Trp Glu Ser Pro Gln Val Pro Pro Asp Arg Gln Lys		560
565	570	575
Gly Met Phe Pro Arg Gly Thr Asp Gln Val Arg Leu Asp Glu Gln Leu		
580	585	590
Thr Ser Leu Glu Glu Asn Val Tyr Leu Ala Ala Gly Thr Val Tyr Gly		
595	600	605

Leu Glu Thr Gln Leu Thr Glu Leu Glu Asp Ala Ala Arg Cys Ile His
 610 615 620
 Ser Gly Thr Asp Glu Thr His Leu Ala Asp Leu Glu Asp Gln Val Ala
 625 630 635 640
 Thr Ala Ala Ala Gln Val His His Ala Glu Leu Gln Ile Ser Asp Ile
 645 650 655
 Glu Ser Arg Ile Ser Ala Leu Thr Ile Ala Gly Leu Asn Ile Ala Pro
 660 665 670
 Cys Val Arg Phe Thr Arg Arg Asp Gln Lys Gln Arg Thr Gln Val
 675 680 685
 Gln Thr Ile Asp Thr Ser Arg Gln Gln Arg Arg Lys Leu Pro Ala Pro
 690 695 700
 Pro Val Lys Ala Glu Lys Ile Glu Thr Ser Ser Val Thr Thr Ile Lys
 705 710 715 720
 Thr Phe Asn His Asn Phe Ile Leu Gln Gly Ser Ser Thr Asn Arg Thr
 725 730 735
 Lys Glu Arg Lys Gly Thr Thr Lys Asp Leu Met Glu Pro Ala Leu Glu
 740 745 750
 Ser Ala Val Met Tyr
 755

<210> 3212

<211> 714

<212> PRT

<213> Homo sapiens

<400> 3212

Met Leu His Leu Lys Val Gln Phe Leu Asp Asp Ser Gln Lys Ile Phe

1	5	10	15												
Val	Val	Asp	Gln	Lys	Ser	Ser	Gly	Lys	Ala	Leu	Phe	Asn	Leu	Ser	Cys
20															30
Ser	His	Leu	Asn	Leu	Ala	Glu	Lys	Glu	Tyr	Phe	Gly	Leu	Glu	Phe	Cys
35															45
Ser	His	Ser	Gly	Asn	Asn	Val	Trp	Leu	Glu	Leu	Leu	Lys	Pro	Ile	Thr
50															60
Lys	Gln	Val	Lys	Asn	Pro	Lys	Glu	Ile	Val	Phe	Lys	Phe	Met	Val	Lys
65															80
Phe	Phe	Pro	Val	Asp	Pro	Gly	His	Leu	Arg	Glu	Glu	Leu	Thr	Arg	Tyr
85															95
Leu	Phe	Thr	Leu	Gln	Ile	Lys	Lys	Asp	Leu	Ala	Leu	Gly	Arg	Leu	Pro
100															110
Cys	Ser	Asp	Asn	Cys	Thr	Ala	Leu	Met	Val	Ser	His	Ile	Leu	Gln	Ser
115															125
Glu	Leu	Gly	Asp	Phe	His	Glu	Glu	Thr	Asp	Arg	Lys	His	Leu	Ala	Gln
130															140
Thr	Arg	Tyr	Leu	Pro	Asn	Gln	Asp	Cys	Leu	Glu	Gly	Lys	Ile	Met	His
145															160
Phe	His	Gln	Lys	His	Ile	Gly	Arg	Ser	Pro	Ala	Glu	Ser	Asp	Ile	Leu
165															175
Leu	Leu	Asp	Ile	Ala	Arg	Lys	Leu	Asp	Met	Tyr	Gly	Ile	Arg	Pro	His
180															190
Pro	Ala	Ser	Asp	Gly	Glu	Gly	Met	Gln	Ile	His	Leu	Ala	Val	Ala	His
195															205
Met	Gly	Val	Leu	Val	Leu	Arg	Gly	Asn	Thr	Lys	Ile	Asn	Thr	Phe	Asn
210															220
Trp	Ala	Lys	Ile	Arg	Lys	Leu	Ser	Phe	Lys	Arg	Lys	His	Phe	Leu	Ile
225															240

Lys Leu His Ala Asn Ile Leu Val Leu Cys Lys Asp Thr Leu Glu Phe
 245 250 255
 Thr Met Ala Ser Arg Asp Ala Cys Lys Ala Phe Trp Lys Thr Cys Val
 260 265 270
 Glu Tyr His Ala Phe Phe Arg Leu Ser Glu Glu Pro Lys Ser Lys Pro
 275 280 285
 Lys Thr Leu Leu Cys Ser Lys Gly Ser Ser Phe Arg Tyr Ser Gly Arg
 290 295 300
 Thr Gln Arg Gln Leu Leu Glu Tyr Gly Arg Lys Gly Arg Leu Lys Ser
 305 310 315 320
 Leu Pro Phe Glu Arg Lys His Tyr Pro Ser Gln Tyr His Glu Arg Gln
 325 330 335
 Cys Arg Ser Ser Pro Asp Leu Leu Ser Asp Val Ser Lys Gln Val Glu
 340 345 350
 Asp Leu Arg Leu Ala Tyr Gly Gly Tyr Tyr Gln Asn Val Asn Gly
 355 360 365
 Val His Ala Ser Glu Pro Val Leu Glu Ser Arg Arg Arg Asn Ser Ala
 370 375 380
 Leu Glu Val Thr Phe Ala Thr Glu Leu Glu His Ser Lys Pro Glu Ala
 385 390 395 400
 Asp Pro Thr Leu Leu His Gln Ser Gln Ser Ser Ser Phe Pro Phe
 405 410 415
 Ile Tyr Met Asp Pro Val Phe Asn Thr Glu Pro Asn Pro Asn Pro Asp
 420 425 430
 Pro Arg Asp Ile Phe Ser Glu Arg Ser Ser Leu Ser Ser Phe Gln Thr
 435 440 445
 Ser Cys Lys Phe Ser Gly Asn His Met Ser Ile Tyr Ser Gly Leu Thr
 450 455 460
 Ser Lys Val Arg Pro Ala Lys Gln Leu Thr Tyr Thr Asp Val Pro Tyr

465	470	475	480
Ile Pro Cys Thr Gly Gln Gln Val Gly Ile Met Pro Pro Gln Val Phe			
485	490	495	
Phe Tyr Val Asp Lys Pro Pro Gln Val Pro Arg Trp Ser Pro Ile Arg			
500	505	510	
Ala Glu Glu Arg Thr Ser Pro His Ser Tyr Val Glu Pro Thr Ala Met			
515	520	525	
Lys Pro Ala Glu Arg Ser Pro Arg Asn Ile Arg Met Lys Ser Phe Gln			
530	535	540	
Gln Asp Leu Gln Val Leu Gln Glu Ala Ile Ala Arg Thr Ser Gly Arg			
545	550	555	560
Ser Asn Ile Asn Val Gly Leu Glu Glu Asp Pro Asn Leu Glu Asp			
565	570	575	
Ala Phe Val Cys Asn Ile Gln Glu Gln Thr Pro Lys Arg Ser Gln Ser			
580	585	590	
Gln Ser Asp Met Lys Thr Ile Arg Phe Pro Phe Gly Ser Glu Phe Arg			
595	600	605	
Pro Leu Gly Pro Cys Pro Ala Leu Ser His Lys Ala Asp Leu Phe Thr			
610	615	620	
Asp Met Phe Ala Glu Gln Glu Leu Pro Ala Val Leu Met Asp Gln Ser			
625	630	635	640
Thr Ala Glu Arg Tyr Val Ala Ser Glu Ser Ser Asp Ser Glu Ser Glu			
645	650	655	
Ile Leu Lys Pro Asp Tyr Tyr Ala Leu Tyr Gly Lys Glu Ile Arg Ser			
660	665	670	
Pro Met Ala Arg Ile Arg Leu Ser Ser Gly Ser Leu Gln Leu Asp Glu			
675	680	685	
Glu Asp Glu Asp Ala Tyr Phe Asn Thr Pro Thr Ala Glu Asp Arg Thr			
690	695	700	

Ser Leu Lys Pro Cys Asn Tyr Phe Leu Ala

705 710

<210> 3213

<211> 393

<212> PRT

<213> Homo sapiens

<400> 3213

Met	Glu	Gln	Cys	Ala	Cys	Val	Glu	Arg	Glu	Leu	Asp	Lys	Val	Leu	Gln
1															
								10							15
Lys	Phe	Leu	Thr	Tyr	Gly	Gln	His	Cys	Glu	Arg	Ser	Leu	Glu	Glu	Leu
20							25							30	
Leu	His	Tyr	Val	Gly	Gln	Leu	Arg	Ala	Glu	Leu	Ala	Ser	Ala	Ala	Leu
35						40						45			
Gln	Gly	Thr	Pro	Leu	Ser	Ala	Thr	Leu	Ser	Leu	Val	Met	Ser	Gln	Cys
50						55						60			
Cys	Arg	Lys	Ile	Lys	Asp	Thr	Val	Gln	Lys	Leu	Ala	Ser	Asp	His	Lys
65			70					75						80	
Asp	Ile	His	Ser	Ser	Val	Ser	Arg	Val	Gly	Lys	Ala	Ile	Asp	Arg	Asn
85						90							95		
Phe	Asp	Ser	Glu	Ile	Cys	Gly	Val	Val	Ser	Asp	Ala	Val	Trp	Asp	Ala
100						105							110		
Arg	Glu	Gln	Gln	Gln	Ile	Leu	Gln	Met	Ala	Ile	Val	Glu	His	Leu	
115					120							125			
Tyr	Gln	Gln	Gly	Met	Leu	Ser	Val	Ala	Glu	Glu	Leu	Cys	Gln	Glu	Ser
130						135						140			
Thr	Leu	Asn	Val	Asp	Leu	Asp	Phe	Lys	Gln	Pro	Phe	Glu	Leu	Asn	

145	150	155	160
Arg Ile Leu Glu Ala Leu His Glu Gln Asp Leu Gly Pro Ala Leu Glu			
165	170	175	
Trp Ala Val Ser His Arg Gln Arg Leu Leu Glu Leu Asn Ser Ser Leu			
180	185	190	
Glu Phe Lys Leu His Arg Leu His Phe Ile Arg Leu Leu Ala Gly Gly			
195	200	205	
Pro Ala Lys Gln Leu Glu Ala Leu Ser Tyr Ala Arg His Phe Gln Pro			
210	215	220	
Phe Ala Arg Leu His Gln Arg Glu Ile Gln Val Met Met Gly Ser Leu			
225	230	235	240
Val Tyr Leu Arg Leu Gly Leu Glu Lys Ser Pro Tyr Cys His Leu Leu			
245	250	255	
Asp Ser Ser His Trp Ala Glu Ile Cys Glu Thr Phe Thr Arg Asp Ala			
260	265	270	
Cys Ser Leu Leu Gly Leu Ser Val Glu Ser Pro Leu Ser Val Ser Phe			
275	280	285	
Ala Ser Gly Cys Val Ala Leu Pro Val Leu Met Asn Ile Lys Ala Val			
290	295	300	
Ile Glu Gln Arg Gln Cys Thr Gly Val Trp Asn His Lys Asp Glu Leu			
305	310	315	320
Pro Ile Glu Ile Glu Leu Gly Met Lys Cys Trp Tyr His Ser Val Phe			
325	330	335	
Ala Cys Pro Ile Leu Arg Gln Gln Thr Ser Asp Ser Asn Pro Pro Ile			
340	345	350	
Lys Leu Ile Cys Gly His Val Ile Ser Arg Asp Ala Leu Asn Lys Leu			
355	360	365	
Ile Asn Gly Gly Lys Leu Lys Cys Pro Tyr Cys Pro Met Glu Gln Asn			
370	375	380	

● Pro Ala Asp Gly Lys Arg Ile Ile Phe

385 390

<210> 3214

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3214

Met Thr Gly Phe Lys Ala Ser Lys Asn Arg Val Thr Leu Leu Ser Asp

1 5 10 15

Thr Asn Thr Ala Ala Asp Leu Lys Leu Lys Pro Val Leu Thr Ala His

20 25 30

Ser Glu Asn Leu Arg Ile Leu Lys Asn Cys Ala Lys Ser Thr Val Pro

35 40 45

Met Cys Asn Lys Ala Leu Met Ala Ala Cys Leu Phe Thr Ile Ser Phe

50 55 60

Thr Glu Tyr Leu Lys Pro Thr Thr Glu Asn Tyr Cys Ser Gly Lys Lys

65 70 75 80

Ile Leu Phe Lys Ile Val Leu Leu Phe Asp Asn Gly Pro Gly His Pro

85 90 95

Arg Ala Leu Met Glu Val Cys Lys Glu Met Asn Ala Val Phe Met Pro

100 105 110

Ala Asn Thr Thr Pro Val Leu Tyr Ser Met Asp His Arg Val Ile Leu

115 120 125

Thr Phe Lys Ser Tyr Tyr Leu Arg Asn Lys Phe Cys Lys Ala Ile Ala

130 135 140

Ala Thr His Ser Tyr Ser Cys Asp Gly Ser Gly Gln Ser Lys Leu Lys

145	150	155	160
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Thr

<210> 3215

<211> 352

<212> PRT

<213> Homo sapiens

<400> 3215

Met Asn Thr Ile Val Phe Asn Lys Leu Ser Gly Ala Val Leu Phe Glu

1

5

10

15

Asp Gly Gly Ala Ser Glu Arg Glu Arg Gly Gly Arg Pro Tyr Ser Gly

20

25

30

Val Leu Asp Ser Pro His Ala Arg Pro Glu Val Gly Ile Pro Asp Gly

35

40

45

Pro Pro Leu Lys Asp Asn Leu Gly Leu Arg His Arg Arg Thr Gly Ala

50

55

60

Arg Gln Asn Gly Gly Lys Val Arg His Lys Arg Gln Ala Leu Gln Asp

65

70

75

80

Met Ala Arg Pro Leu Lys Gln Trp Leu Tyr Lys His Arg Asp Asn Pro

85

90

95

Tyr Pro Thr Lys Thr Glu Lys Ile Leu Leu Ala Leu Gly Ser Gln Met

100

105

110

Thr Leu Val Gln Val Ser Asn Trp Phe Ala Asn Ala Arg Arg Arg Leu

115

120

125

Lys Asn Thr Val Arg Gln Pro Asp Leu Ser Trp Ala Leu Arg Ile Lys

130

135

140

Leu Tyr Asn Lys Tyr Val Gln Gly Asn Ala Glu Arg Leu Ser Val Ser
 145 150 155 160
 Ser Asp Asp Ser Cys Ser Glu Asp Gly Glu Asn Pro Pro Arg Thr His
 165 170 175
 Met Asn Glu Gly Gly Tyr Asn Thr Pro Val His His Pro Val Ile Lys
 180 185 190
 Ser Glu Asn Ser Val Ile Lys Ala Gly Val Arg Pro Glu Ser Arg Ala
 195 200 205
 Ser Glu Asp Tyr Val Ala Pro Pro Lys Tyr Lys Ser Ser Leu Leu Asn
 210 215 220
 Arg Tyr Leu Asn Asp Ser Leu Arg His Val Met Ala Thr Asn Thr Thr
 225 230 235 240
 Met Met Gly Lys Thr Arg Gln Arg Asn His Ser Gly Ser Phe Ser Ser
 245 250 255
 Asn Glu Phe Glu Glu Glu Leu Val Ser Pro Ser Ser Glu Thr Glu
 260 265 270
 Gly Asn Phe Val Tyr Arg Thr Asp Thr Leu Glu Asn Gly Ser Asn Lys
 275 280 285
 Gly Glu Ser Ala Ala Asn Arg Lys Gly Pro Ser Lys Asp Asp Thr Tyr
 290 295 300
 Trp Lys Glu Ile Asn Ala Ala Met Ala Leu Thr Asn Leu Ala Gln Gly
 305 310 315 320
 Lys Asp Lys Leu Gln Gly Thr Thr Ser Cys Ile Ile Gln Lys Ser Ser
 325 330 335
 His Ile Ala Glu Val Lys Thr Val Lys Val Pro Leu Val Gln Gln Phe
 340 345 350

<210> 3216

<211> 1284

<212> PRT

<213> Homo sapiens

<400> 3216

Met His Val Phe Ile Val Gly Met Ser Leu Ser Ser Val Thr Leu Ala

1 5 10 15

Ser Ala Leu Gln Val Arg Gly Glu Ala Leu Ser Glu Glu Glu Ile Trp

20 25 30

Ser Leu Leu Phe Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu Arg Asn

35 40 45

Asp Ser Ser Asp Tyr Val Val Cys Pro Trp Ser Ala Leu Leu Ser Ala

50 55 60

Ala Gly Ser Leu Ser Phe Gln Gly Arg Val Ser His Ile Glu Ala Ala

65 70 75 80

Pro Phe Lys Ala Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp Glu Gln

85 90 95

Pro Asp Ala Ser Gln Pro Leu Gln Leu Cys Glu Pro Leu His Ser Ile

100 105 110

Leu Leu Thr Met Cys Glu Asp Gln Pro His Arg Arg Cys Thr Leu Gln

115 120 125

Ser Val Leu Glu Ala Cys Arg Val His Glu Lys Glu Val Ser Val Tyr

130 135 140

Pro Ala Pro Ala Gly Leu His Ile Arg Arg Leu Val Gly Leu Val Leu

145 150 155 160

Gly Thr Ile Ser Glu Val Glu Lys Arg Val Val Glu Glu Ser Ser Ser

165 170 175

Val Gln Gln Asn Arg Ser Tyr Leu Leu Arg Lys Arg Leu Arg Gly Thr

180 185 190

Ser Ser Glu Ser Pro Ala Ala Gln Ala Pro Glu Cys Leu His Pro Cys
 195 200 205
 Arg Val Ser Glu Arg Ser Thr Glu Thr Gln Ser Ser Pro Glu Pro His
 210 215 220
 Trp Ser Thr Leu Thr His Ser His Cys Ser Leu Leu Val Asn Arg Ala
 225 230 235 240
 Leu Pro Gly Ala Asp Pro Gln Asp Gln Gln Ala Gly Arg Arg Leu Ser
 245 250 255
 Ser Gly Ser Val His Ser Ala Ala Asp Ser Ser Trp Pro Thr Thr Pro
 260 265 270
 Ser Gln Arg Gly Phe Leu Gln Arg Arg Ser Lys Phe Ser Arg Pro Glu
 275 280 285
 Phe Ile Leu Leu Ala Gly Glu Ala Pro Met Thr Leu His Leu Pro Gly
 290 295 300
 Ser Val Val Thr Lys Lys Gly Lys Ser Tyr Leu Ala Leu Arg Asp Leu
 305 310 315 320
 Cys Val Val Leu Leu Asn Gly Gln His Leu Glu Val Lys Cys Asp Val
 325 330 335
 Glu Ser Thr Val Gly Ala Val Phe Asn Ala Val Thr Ser Phe Ala Asn
 340 345 350
 Leu Glu Glu Leu Thr Tyr Phe Gly Leu Ala Tyr Met Lys Ser Lys Glu
 355 360 365
 Phe Phe Phe Leu Asp Ser Glu Thr Arg Leu Cys Lys Ile Ala Pro Glu
 370 375 380
 Gly Trp Arg Glu Gln Pro Gln Lys Thr Ser Met Asn Thr Phe Thr Leu
 385 390 395 400
 Phe Leu Arg Ile Lys Phe Phe Val Ser His Tyr Gly Leu Leu Gln His
 405 410 415
 Ser Leu Thr Arg His Gln Phe Tyr Leu Gln Leu Arg Lys Asp Ile Leu

420	425	430
Glu Glu Arg Leu Tyr Cys Asn Glu Glu Ile Leu Leu Gln Leu Gly Val		
435	440	445
Leu Ala Leu Gln Ala Glu Phe Gly Asn Tyr Pro Lys Glu Val Glu Ser		
450	455	460
Lys Pro Tyr Phe His Val Glu Asp Tyr Ile Pro Ala Ser Leu Ile Glu		
465	470	475
Arg Met Thr Ala Leu Arg Val Gln Val Glu Val Ser Glu Met His Arg		
485	490	495
Leu Ser Ser Ala Leu Trp Gly Glu Asp Ala Glu Leu Glu Phe Leu Arg		
500	505	510
Val Thr Gln Gln Leu Pro Glu Tyr Gly Val Leu Val His Gln Val Phe		
515	520	525
Ser Glu Lys Arg Arg Pro Glu Glu Glu Met Ala Leu Gly Ile Cys Ala		
530	535	540
Lys Gly Val Ile Val Tyr Glu Val Lys Asn Asn Ser Arg Ile Ala Met		
545	550	555
Leu Arg Phe Gln Trp Arg Glu Thr Gly Lys Ile Ser Thr Tyr Gln Lys		
565	570	575
Lys Phe Thr Ile Thr Ser Ser Val Thr Gly Lys Lys His Thr Phe Val		
580	585	590
Thr Asp Ser Ala Lys Thr Ser Lys Tyr Leu Leu Asp Leu Cys Ser Ala		
595	600	605
Gln His Gly Phe Asn Ala Gln Met Gly Ser Gly Gln Pro Ser His Val		
610	615	620
Leu Phe Asp His Asp Lys Phe Val Gln Met Ala Asn Leu Ser Pro Ala		
625	630	635
His Gln Ala Arg Ser Lys Pro Leu Ile Trp Ile Gln Arg Leu Ser Cys		
645	650	655

Ser Glu Asn Glu Leu Phe Val Ser Arg Leu Gln Gly Ala Ala Gly Gly
 660 665 670
 Leu Leu Ser Thr Ser Met Asp Asn Phe Asn Val Asp Gly Ser Lys Glu
 675 680 685
 Ala Gly Ala Glu Gly Ile Gly Arg Ser Pro Cys Thr Gly Arg Glu Gln
 690 695 700
 Leu Lys Ser Ala Cys Val Ile Gln Lys Pro Met Thr Trp Asp Ser Leu
 705 710 715 720
 Ser Gly Pro Pro Val Gln Ser Met His Ala Gly Ser Lys Asn Asn Arg
 725 730 735
 Arg Lys Ser Phe Ile Ala Glu Pro Gly Arg Glu Ile Val Arg Val Thr
 740 745 750
 Leu Lys Arg Asp Pro His Arg Gly Phe Gly Phe Val Ile Asn Glu Gly
 755 760 765
 Glu Tyr Ser Gly Gln Ala Asp Pro Gly Ile Phe Ile Ser Ser Ile Ile
 770 775 780
 Pro Gly Gly Pro Ala Glu Lys Ala Lys Thr Ile Lys Pro Gly Gln
 785 790 795 800
 Ile Leu Ala Leu Asn His Ile Ser Leu Glu Gly Phe Thr Phe Asn Met
 805 810 815
 Ala Val Arg Met Ile Gln Asn Ser Pro Asp Asn Ile Glu Leu Ile Ile
 820 825 830
 Ser Gln Ser Lys Gly Val Gly Gly Asn Asn Pro Asp Glu Glu Lys Asn
 835 840 845
 Gly Thr Ala Asn Ser Gly Val Ser Ser Thr Asp Ile Leu Ser Phe Gly
 850 855 860
 Tyr Gln Gly Ser Leu Ser Ser His Thr Gln Asp Gln Asp Arg Asn Thr
 865 870 875 880
 Glu Glu Leu Asp Met Ala Gly Val Gln Ser Leu Val Pro Arg Leu Arg

885	890	895
His Gln Leu Ser Phe Leu Pro Leu Lys Gly Ala Gly Ser Ser Cys Pro		
900	905	910
Pro Ser Pro Pro Glu Ile Ser Ala Gly Glu Ile Tyr Phe Val Glu Leu		
915	920	925
Val Lys Glu Asp Gly Thr Leu Gly Phe Ser Val Thr Gly Gly Ile Asn		
930	935	940
Thr Ser Val Pro Tyr Gly Gly Ile Tyr Val Lys Ser Ile Val Pro Gly		
945	950	955
Gly Pro Ala Ala Lys Glu Gly Gln Ile Leu Gln Gly Asp Arg Leu Leu		
965	970	975
Gln Val Asp Gly Val Ile Leu Cys Gly Leu Thr His Lys Gln Ala Val		
980	985	990
Gln Cys Leu Lys Gly Pro Gly Gln Val Ala Arg Leu Val Leu Glu Arg		
995	1000	1005
Arg Val Pro Arg Ser Thr Gln Gln Cys Pro Ser Ala Asn Asp Ser Met		
1010	1015	1020
Gly Asp Glu Arg Thr Ala Val Ser Leu Val Thr Ala Leu Pro Gly Arg		
1025	1030	1035
1040		
Pro Ser Ser Cys Val Ser Val Thr Asp Gly Pro Lys Phe Glu Val Lys		
1045	1050	1055
Leu Lys Lys Asn Ala Asn Gly Leu Gly Phe Ser Phe Val Gln Met Glu		
1060	1065	1070
Lys Glu Ser Cys Ser His Leu Lys Ser Asp Leu Val Arg Ile Lys Arg		
1075	1080	1085
Leu Phe Pro Gly Gln Pro Ala Glu Glu Asn Gly Ala Ile Ala Ala Gly		
1090	1095	1100
Asp Ile Ile Leu Ala Val Asn Gly Arg Ser Thr Glu Gly Leu Ile Phe		
1105	1110	1115
1120		

Gln Glu Val Leu His Leu Leu Arg Gly Ala Pro Gln Glu Val Thr Leu
 1125 1130 1135
 Leu Leu Cys Arg Pro Pro Pro Gly Ala Leu Pro Glu Met Glu Gln Glu
 1140 1145 1150
 Trp Gln Thr Pro Glu Leu Ser Ala Asp Lys Glu Phe Thr Arg Ala Thr
 1155 1160 1165
 Cys Thr Asp Ser Cys Thr Ser Pro Ile Leu Asp Gln Glu Asp Ser Trp
 1170 1175 1180
 Arg Asp Ser Ala Ser Pro Asp Ala Gly Glu Gly Leu Gly Leu Arg Pro
 1185 1190 1195 1200
 Glu Ser Ser Gln Lys Ala Ile Arg Glu Ala Gln Trp Gly Gln Asn Arg
 1205 1210 1215
 Glu Arg Pro Trp Ala Ser Ser Leu Thr His Ser Pro Glu Ser His Pro
 1220 1225 1230
 His Leu Cys Lys Leu His Gln Glu Arg Asp Glu Ser Thr Leu Ala Thr
 1235 1240 1245
 Ser Leu Glu Lys Asp Val Arg Gln Asn Cys Tyr Ser Val Cys Asp Ile
 1250 1255 1260
 Met Arg Leu Gly Arg Tyr Ser Phe Ser Ser Pro Leu Thr Arg Leu Ser
 1265 1270 1275 1280
 Thr Asp Ile Phe

<210> 3217

<211> 971

<212> PRT

<213> Homo sapiens

<400> 3217

Met Gly Val Ala Gly Arg Asn Arg Pro Gly Ala Ala Trp Ala Val Leu
 1 5 10 15
 Leu Leu Leu Leu Leu Pro Pro Leu Leu Leu Ala Gly Ala Val
 20 25 30
 Pro Pro Gly Arg Gly Arg Ala Ala Gly Pro Gln Glu Asp Val Asp Glu
 35 40 45
 Cys Ala Gln Gly Leu Asp Asp Cys His Ala Asp Ala Leu Cys Gln Asn
 50 55 60
 Thr Pro Thr Ser Tyr Lys Cys Ser Cys Lys Pro Gly Tyr Gln Gly Glu
 65 70 75 80
 Gly Arg Gln Cys Glu Asp Ile Asp Glu Cys Gly Asn Glu Leu Asn Gly
 85 90 95
 Gly Cys Val His Asp Cys Leu Asn Ile Pro Gly Asn Tyr Arg Cys Thr
 100 105 110
 Cys Phe Asp Gly Phe Met Leu Ala His Asp Gly His Asn Cys Leu Asp
 115 120 125
 Val Asp Glu Cys Leu Glu Asn Asn Gly Gly Cys Gln His Thr Cys Val
 130 135 140
 Asn Val Met Gly Ser Tyr Glu Cys Cys Cys Lys Glu Gly Phe Phe Leu
 145 150 155 160
 Ser Asp Asn Gln His Thr Cys Ile His Arg Ser Glu Glu Gly Leu Ser
 165 170 175
 Cys Met Asn Lys Asp His Gly Cys Ser His Ile Cys Lys Glu Ala Pro
 180 185 190
 Arg Gly Ser Val Ala Cys Glu Cys Arg Pro Gly Phe Glu Leu Ala Lys
 195 200 205
 Asn Gln Arg Asp Cys Ile Leu Thr Cys Asn His Gly Asn Gly Gly Cys
 210 215 220

Gln His Ser Cys Asp Asp Thr Ala Asp Gly Pro Glu Cys Ser Cys His
 225 230 235 240
 Pro Gln Tyr Lys Met His Thr Asp Gly Arg Ser Cys Leu Glu Arg Glu
 245 250 255
 Asp Thr Val Leu Glu Val Thr Glu Ser Asn Thr Thr Ser Val Val Asp
 260 265 270
 Gly Asp Lys Arg Val Lys Arg Arg Leu Leu Met Glu Thr Cys Ala Val
 275 280 285
 Asn Asn Gly Gly Cys Asp Arg Thr Cys Lys Asp Thr Ser Thr Gly Val
 290 295 300
 His Cys Ser Cys Pro Val Gly Phe Thr Leu Gln Leu Asp Gly Lys Thr
 305 310 315 320
 Cys Lys Asp Ile Asp Glu Cys Gln Thr Arg Asn Gly Gly Cys Asp His
 325 330 335
 Phe Cys Lys Asn Ile Val Gly Ser Phe Asp Cys Gly Cys Lys Gly
 340 345 350
 Phe Lys Leu Leu Thr Asp Glu Lys Ser Cys Gln Asp Val Asp Glu Cys
 355 360 365
 Ser Leu Asp Arg Thr Cys Asp His Ser Cys Ile Asn His Pro Gly Thr
 370 375 380
 Phe Ala Cys Ala Cys Asn Arg Gly Tyr Thr Leu Tyr Gly Phe Thr His
 385 390 395 400
 Cys Gly Asp Thr Asn Glu Cys Ser Ile Asn Asn Gly Gly Cys Gln Gln
 405 410 415
 Val Cys Val Asn Thr Val Gly Ser Tyr Glu Cys Gln Cys His Pro Gly
 420 425 430
 Tyr Lys Leu His Trp Asn Lys Lys Asp Cys Val Glu Val Lys Gly Leu
 435 440 445
 Leu Pro Thr Ser Val Ser Pro Arg Val Ser Leu His Cys Gly Lys Ser

450	455	460
Gly	Gly	Gly
Asp	Gly	Cys
Gly	Phe	Leu
Cys	Arg	His
His	Ser	Gly
Ile	His	Leu
465	470	475
Ser	Ser	Gly
Gly	Leu	Gln
Gly	Ala	Tyr
Ser	Val	Thr
Cys	Gly	Ser
Ser	Ser	Ser
485	490	495
Pro	Leu	Arg
Asn	Gln	Gln
Lys	Ser	Asn
Asp	Ser	Ala
Phe	Gly	Asp
500	505	510
Val	Thr	Thr
Ile	Arg	Thr
Ser	Val	Thr
Phe	Lys	Leu
Asn	Glu	Gly
515	520	525
Cys	Ser	Leu
Lys	Asn	Ala
Glu	Leu	Phe
Pro	Glu	Gly
Leu	Arg	Pro
530	535	540
Leu	Pro	Glu
Lys	His	Ser
Ser	Val	Lys
Glu	Ser	Phe
Arg	Tyr	Val
545	550	555
560		
Leu	Thr	Cys
Ser	Ser	Gly
Lys	Gln	Val
Val	Pro	Gly
Ala	Pro	Gly
565	570	575
Ser	Thr	Pro
Lys	Glu	Met
Phe	Ile	Thr
Val	Glu	Phe
Glu	Leu	Glu
580	585	590
Asn	Gln	Lys
Glu	Val	Thr
Ala	Ser	Cys
Asp	Leu	Ser
Cys	Ile	Val
595	600	605
Arg	Thr	Glu
Lys	Arg	Leu
Arg	Lys	Ala
610	615	620
Val	His	Arg
Glu	Gln	Phe
His	Leu	Gln
625	630	635
640		
Val	Ala	Lys
Lys	Pro	Pro
Arg	Thr	Ser
Glu	Arg	Gln
645	650	655
Gly	Val	Gly
Gln	Gly	His
Ala	Glu	Asn
Gln	Cys	Gly
Cys	Gly	Leu
Gln	Pro	
660	665	670
Gly	Glu	Tyr
Ser	Ala	Asp
Gly	Phe	Ala
675	680	685
Pro	Cys	Gln
Gln	Leu	Cys
Ala	Cys	Ala
Leu		

Gly Thr Phe Gln Pro Glu Ala Gly Arg Thr Ser Cys Phe Pro Cys Gly
 690 695 700
 Gly Gly Leu Ala Thr Lys His Gln Gly Ala Thr Ser Phe Gln Asp Cys
 705 710 715 720
 Glu Thr Arg Val Gln Cys Ser Pro Gly His Phe Tyr Asn Thr Thr Thr
 725 730 735
 His Arg Cys Ile Arg Cys Pro Val Gly Thr Tyr Gln Pro Glu Phe Gly
 740 745 750
 Lys Asn Asn Cys Val Ser Cys Pro Gly Asn Thr Thr Thr Asp Phe Asp
 755 760 765
 Gly Ser Thr Asn Ile Thr Gln Cys Lys Asn Arg Arg Cys Gly Gly Glu
 770 775 780
 Leu Gly Asp Phe Thr Gly Tyr Ile Glu Ser Pro Asn Tyr Pro Gly Asn
 785 790 795 800
 Tyr Pro Ala Asn Thr Glu Cys Thr Trp Thr Ile Asn Pro Pro Pro Lys
 805 810 815
 Arg Arg Ile Leu Ile Val Val Pro Glu Ile Phe Leu Pro Ile Glu Asp
 820 825 830
 Asp Cys Gly Asp Tyr Leu Val Met Arg Lys Thr Ser Ser Asn Ser
 835 840 845
 Val Thr Thr Tyr Glu Thr Cys Gln Thr Tyr Glu Arg Pro Ile Ala Phe
 850 855 860
 Thr Ser Arg Ser Lys Lys Leu Trp Ile Gln Phe Lys Ser Asn Glu Gly
 865 870 875 880
 Asn Ser Ala Arg Gly Phe Gln Gly Pro Tyr Val Thr Tyr Asp Glu Asp
 885 890 895
 Tyr Gln Glu Leu Ile Glu Asp Ile Val Arg Asp Gly Arg Leu Tyr Ala
 900 905 910
 Ser Glu Asn His Gln Glu Ile Leu Lys Asp Lys Lys Leu Ile Lys Ala

915	920	925
Leu Phe Asp Val Leu Ala His Pro Gln Asn Tyr Phe Lys Tyr Thr Ala		
930	935	940
Gln Glu Ser Arg Glu Met Phe Pro Arg Ser Phe Ile Arg Leu Leu Arg		
945	950	955
Ser Lys Val Ser Arg Phe Leu Arg Pro Tyr Lys		
965	970	

<210> 3218

<211> 426

<212> PRT

<213> Homo sapiens

<400> 3218

Met Leu Gly Ser Phe Ser Gly Thr Thr Val Pro Ala Leu Leu Asn Ser			
1	5	10	15

Thr Ser Asn Gln Leu Tyr Leu His Phe Tyr Ser Asp Ile Ser Val Ser			
20	25	30	

Ala Ala Gly Phe His Leu Glu Tyr Lys Thr Val Gly Leu Ser Ser Cys			
35	40	45	

Pro Glu Pro Ala Val Pro Ser Asn Gly Val Lys Thr Gly Glu Arg Tyr			
50	55	60	

Leu Val Asn Asp Val Val Ser Phe Gln Cys Glu Pro Gly Tyr Ala Leu			
65	70	75	80

Gln Gly His Ala His Ile Ser Cys Met Pro Gly Thr Val Arg Arg Trp			
85	90	95	

Asn Tyr Pro Pro Leu Cys Ile Ala Gln Cys Gly Gly Thr Val Glu			
100	105	110	

Glu Met Glu Gly Val Ile Leu Ser Leu Gly Phe Pro Gly Asn Tyr Pro
 115 120 125
 Ser Asn Met Asp Cys Ser Trp Lys Ile Ala Leu Pro Val Gly Phe Gly
 130 135 140
 Ala His Ile Gln Phe Leu Asn Phe Ser Thr Glu Pro Asn His Asp Tyr
 145 150 155 160
 Ile Glu Ile Arg Asn Gly Pro Tyr Glu Thr Ser Arg Met Met Gly Arg
 165 170 175
 Phe Ser Gly Ser Glu Leu Pro Ser Ser Leu Leu Ser Thr Ser His Glu
 180 185 190
 Thr Thr Val Tyr Phe His Ser Asp His Ser Gln Asn Arg Pro Gly Phe
 195 200 205
 Lys Leu Glu Tyr Gln Ala Tyr Glu Leu Gln Glu Cys Pro Asp Pro Glu
 210 215 220
 Pro Phe Ala Asn Gly Ile Val Arg Gly Ala Gly Tyr Asn Val Gly Gln
 225 230 235 240
 Ser Val Thr Phe Glu Cys Leu Pro Gly Tyr Gln Leu Thr Gly His Pro
 245 250 255
 Val Leu Thr Cys Gln His Gly Thr Asn Arg Asn Trp Asp His Pro Leu
 260 265 270
 Pro Lys Cys Glu Val Pro Cys Gly Gly Asn Ile Thr Ser Ser Asn Gly
 275 280 285
 Thr Val Tyr Ser Pro Gly Phe Pro Ser Pro Tyr Ser Ser Ser Gln Asp
 290 295 300
 Cys Val Trp Leu Ile Thr Val Pro Ile Gly His Gly Val Arg Leu Asn
 305 310 315 320
 Leu Ser Leu Leu Gln Thr Glu Pro Ser Gly Asp Phe Ile Thr Ile Trp
 325 330 335
 Asp Gly Pro Gln Gln Thr Ala Pro Arg Leu Gly Val Phe Thr Arg Ser

340	345	350
Met Ala Lys Lys Thr Val Gln Ser Ser Ser Asn Gln Val Leu Leu Lys		
355	360	365
Phe His Arg Asp Ala Ala Thr Gly Gly Ile Phe Ala Ile Ala Phe Ser		
370	375	380
Asp His Cys Arg Tyr Phe Asn Gln Lys Ser Gly Lys Leu Asp Phe Thr		
385	390	395
Pro Ser Ser Thr Leu Gly Gln Leu Cys Lys Thr Leu His Arg Ser Leu		
405	410	415
Pro His Leu Arg Leu Gln Phe Leu His Leu		
420	425	

<210> 3219

<211> 292

<212> PRT

<213> Homo sapiens

<400> 3219

Met Ser Arg Ile Pro Leu Gly Lys Val Leu Leu Arg Asn Val Ile Arg			
1	5	10	15
His Thr Asp Ala His Asn Lys Ile Gln Glu Glu Ser Asp Met Trp Lys			
20	25	30	
Ile Arg Glu Leu Glu Lys Gln Met Glu Asp Ala Tyr Arg Gly Thr Lys			
35	40	45	
Arg Lys Met Leu Pro Ser Ser Ser Arg Met Arg Ser Asp Gly Phe			
50	55	60	
Asp Glu Glu Ser Gln Arg Tyr Tyr Trp Arg Pro Lys Asn Glu Ile Ser			
65	70	75	80

Gly Thr Leu Glu Asp Asp Phe Leu Lys Ala Lys Ser Trp Asn Lys Lys
 85 90 95
 Phe Tyr Asp Tyr Glu Ala Asn Met Pro Asp Arg Trp Gly His Ser Gly
 100 105 110
 Tyr Lys Glu Leu Tyr Pro Glu Glu Phe Glu Thr Asn Ser Asp Gln Gln
 115 120 125
 Asp Ile Thr Asn Gly Lys Lys Thr Ser Pro Gln Val Lys Ser Ser Thr
 130 135 140
 His Glu Ser Arg Lys His Lys Lys Ser Lys Lys Ser His Lys Lys Lys
 145 150 155 160
 Gln Lys Lys Arg Ser His Lys Lys Gln Lys Lys Ser Lys Lys Glu Ala
 165 170 175
 Thr Asp Ile Thr Ala Asp Ser Ser Glu Phe Ser Glu Glu Thr Gly
 180 185 190
 Ala Ser Gly Thr Arg Lys Gly Lys Gln Pro His Lys Arg Lys Lys
 195 200 205
 Ser Arg Lys Lys Ser Leu Lys Lys Pro Ala Leu Phe Leu Glu Ala Glu
 210 215 220
 Ser Asn Thr Ser His Ser Asp Asp Ser Ala Ser Ser Ser Glu Glu
 225 230 235 240
 Ser Glu Glu Arg Asp Thr Lys Lys Thr Lys Arg Lys Lys Arg Glu Lys
 245 250 255
 Lys Ala His Thr Ser Val Ala Asn Asn Glu Ile Gln Glu Arg Thr Asn
 260 265 270
 Lys Arg Thr Asn Trp Lys Val Ala Thr Asp Glu Arg Ser Ala Glu Ser
 275 280 285
 Ser Glu Asp Asp
 290

<210> 3220

<211> 1023

<212> PRT

<213> Homo sapiens

<400> 3220

Met Ser Leu Gly Val Ala Ala Ile Asn Gln Ala Ile Lys Glu Gly Lys

1

5

10

15

Ala Ala Gln Thr Glu Arg Val Leu Arg Asn Pro Ala Val Ala Leu Arg

20

25

30

Gly Val Val Pro Asp Cys Ala Asn Gly Tyr Gln Arg Ala Leu Glu Ser

35

40

45

Ala Met Ala Lys Lys Gln Arg Pro Ala Asp Thr Ala Phe Trp Val Gln

50

55

60

His Asp Met Lys Asp Gly Thr Ala Tyr Tyr Phe His Leu Gln Thr Phe

65

70

75

80

Gln Gly Ile Trp Glu Gln Pro Pro Gly Cys Pro Leu Asn Thr Ser His

85

90

95

Leu Thr Arg Glu Glu Ile Gln Ser Ala Val Thr Lys Val Thr Ala Ala

100

105

110

Tyr Asp Arg Gln Gln Leu Trp Lys Ala Asn Val Gly Phe Val Ile Gln

115

120

125

Leu Gln Ala Arg Leu Arg Gly Phe Leu Val Arg Gln Lys Phe Ala Glu

130

135

140

His Ser His Phe Leu Arg Thr Trp Leu Pro Ala Val Ile Lys Ile Gln

145

150

155

160

Ala His Trp Arg Gly Tyr Arg Gln Arg Lys Ile Tyr Leu Glu Trp Leu

165

170

175

Gln Tyr Phe Lys Ala Asn Leu Asp Ala Ile Ile Lys Ile Gln Ala Trp
 180 185 190
 Ala Arg Met Trp Ala Ala Arg Arg Gln Tyr Leu Arg Arg Leu His Tyr
 195 200 205
 Phe Gln Lys Asn Val Asn Ser Ile Val Lys Ile Gln Ala Phe Phe Arg
 210 215 220
 Ala Arg Lys Ala Gln Asp Asp Tyr Arg Ile Leu Val His Ala Pro His
 225 230 235 240
 Pro Pro Leu Ser Val Val Arg Arg Phe Ala His Leu Leu Asn Gln Ser
 245 250 255
 Gln Gln Asp Phe Leu Ala Glu Ala Glu Leu Leu Lys Leu Gln Glu Glu
 260 265 270
 Val Val Arg Lys Ile Arg Ser Asn Gln Gln Leu Glu Gln Asp Leu Asn
 275 280 285
 Ile Met Asp Ile Lys Ile Gly Leu Leu Val Lys Asn Arg Ile Thr Leu
 290 295 300
 Gln Glu Val Val Ser His Cys Lys Lys Leu Thr Lys Arg Asn Lys Glu
 305 310 315 320
 Gln Leu Ser Asp Met Met Val Leu Asp Lys Gln Lys Gly Leu Lys Ser
 325 330 335
 Leu Ser Lys Glu Lys Arg Gln Lys Leu Glu Ala Tyr Gln His Leu Phe
 340 345 350
 Tyr Leu Leu Gln Thr Gln Pro Ile Tyr Leu Ala Lys Leu Ile Phe Gln
 355 360 365
 Met Pro Gln Asn Lys Thr Thr Lys Phe Met Glu Ala Val Ile Phe Ser
 370 375 380
 Leu Tyr Asn Tyr Ala Ser Ser Arg Arg Glu Ala Tyr Leu Leu Leu Gln
 385 390 395 400
 Leu Phe Lys Thr Ala Leu Gln Glu Glu Ile Lys Ser Lys Val Glu Gln

405	410	415
Pro Gln Asp Val Val Thr Gly Asn Pro Thr Val Val Arg Leu Val Val		
420	425	430
Arg Phe Tyr Arg Asn Gly Arg Gly Gln Ser Ala Leu Gln Glu Ile Leu		
435	440	445
Gly Lys Val Ile Gln Asp Val Leu Glu Asp Lys Val Leu Ser Val His		
450	455	460
Thr Asp Pro Val His Leu Tyr Lys Asn Trp Ile Asn Gln Thr Glu Ala		
465	470	475
Gln Thr Gly Gln Arg Ser His Leu Pro Tyr Asp Val Thr Pro Glu Gln		
485	490	495
Ala Leu Ser His Pro Glu Val Gln Arg Arg Leu Asp Ile Ala Leu Arg		
500	505	510
Asn Leu Leu Ala Met Thr Asp Lys Phe Leu Leu Ala Ile Thr Ser Ser		
515	520	525
Val Asp Gln Ile Pro Tyr Gly Met Arg Tyr Val Ala Lys Val Leu Lys		
530	535	540
Ala Thr Leu Ala Glu Lys Phe Pro Asp Ala Thr Asp Ser Glu Val Tyr		
545	550	555
Lys Val Val Gly Asn Leu Leu Tyr Tyr Arg Phe Leu Asn Pro Ala Val		
565	570	575
Val Ala Pro Asp Ala Phe Asp Ile Val Ala Met Ala Ala Gly Gly Ala		
580	585	590
Leu Ala Ala Pro Gln Arg His Ala Leu Gly Ala Val Ala Gln Leu Leu		
595	600	605
Gln His Ala Ala Ala Gly Lys Ala Phe Ser Gly Gln Ser Gln His Leu		
610	615	620
Arg Val Leu Asn Asp Tyr Leu Glu Glu Thr His Leu Lys Phe Arg Lys		
625	630	635
		640

Phe Ile His Arg Ala Cys Gln Val Pro Glu Pro Glu Glu Arg Phe Ala
 645 650 655
 Val Asp Glu Tyr Ser Asp Met Val Ala Val Ala Lys Pro Met Val Tyr
 660 665 670
 Ile Thr Val Gly Glu Leu Val Asn Thr His Arg Leu Leu Leu Glu His
 675 680 685
 Gln Asp Cys Ile Ala Pro Asp His Gln Asp Pro Leu His Glu Leu Leu
 690 695 700
 Glu Asp Leu Gly Glu Leu Pro Thr Ile Pro Asp Leu Ile Gly Glu Ser
 705 710 715 720
 Ile Ala Ala Asp Gly His Thr Asp Leu Ser Lys Leu Glu Val Ser Leu
 725 730 735
 Thr Leu Thr Asn Lys Phe Glu Gly Leu Glu Ala Asp Ala Asp Asp Ser
 740 745 750
 Asn Thr Arg Ser Leu Leu Leu Ser Thr Lys Gln Leu Leu Ala Asp Ile
 755 760 765
 Ile Gln Phe His Pro Gly Asp Thr Leu Lys Glu Ile Leu Ser Leu Ser
 770 775 780
 Ala Ser Arg Glu Gln Glu Ala Ala His Lys Gln Leu Met Ser Arg Arg
 785 790 795 800
 Gln Ala Cys Thr Ala Gln Thr Pro Glu Pro Leu Arg Arg His Arg Ser
 805 810 815
 Leu Thr Ala His Ser Leu Leu Pro Leu Ala Glu Lys Gln Arg Arg Val
 820 825 830
 Leu Arg Asn Leu Arg Arg Leu Glu Ala Leu Gly Leu Val Ser Ala Arg
 835 840 845
 Asn Gly Tyr Gln Gly Leu Val Asp Glu Leu Ala Lys Asp Ile Arg Asn
 850 855 860
 Gln His Arg His Arg His Arg Arg Lys Ala Glu Leu Val Lys Leu Gln

865	870	875	880
Ala Thr Leu Gln Gly Leu Ser Thr Lys Thr Thr Phe Tyr Glu Glu Gln			
885	890	895	
Gly Asp Tyr Tyr Ser Gln Tyr Ile Arg Ala Cys Leu Asp His Leu Ala			
900	905	910	
Pro Asp Ser Lys Ser Ser Gly Lys Gly Lys Lys Gln Pro Ser Leu His			
915	920	925	
Tyr Thr Ala Ala Gln Leu Leu Glu Lys Gly Val Leu Val Glu Ile Glu			
930	935	940	
Asp Leu Pro Ala Ser His Phe Arg Asn Val Ile Phe Asp Ile Thr Pro			
945	950	955	960
Gly Asp Glu Ala Gly Lys Phe Glu Val Asn Ala Lys Phe Leu Gly Val			
965	970	975	
Asp Met Glu Arg Phe Gln Leu His Tyr Gln Asp Leu Leu Gln Leu Gln			
980	985	990	
Tyr Glu Gly Val Ala Val Met Lys Leu Phe Asn Lys Ala Lys Val Asn			
995	1000	1005	
Val Asn Leu Leu Ile Phe Leu Leu Asn Lys Lys Phe Leu Arg Lys			
1010	1015	1020	

<210> 3221

<211> 791

<212> PRT

<213> Homo sapiens

<400> 3221

Met Asp Gly Glu Ser Glu Val Asp Phe Ser Ser Asn Ser Ile Thr Pro

1

5

10

15

Leu Trp Arg Arg Arg Ser Ile Pro Gln Pro His Gln Leu Leu Gly Arg
 20 25 30
 Ser Lys Pro Arg Pro Gln Ser Tyr Gln Ser Pro Asn Gly Leu Leu Ile
 35 40 45
 Thr Asp Phe Pro Val Glu Asp Gly Gly Thr Leu Ser Ala Ala Gln Ile
 50 55 60
 Pro Ala Gln Val Pro Thr Ala Ser Asp Ser Arg Thr Val His Arg Ser
 65 70 75 80
 Pro Leu Leu Leu Gly Ala Gln Arg Arg Ala Val Ala Asn Gly Gly Thr
 85 90 95
 Ala Ser Pro Glu Tyr Arg Ala Ala Ser Pro Arg Leu Arg Arg Pro Lys
 100 105 110
 Ser Pro Lys Leu Pro Lys Ala Val Pro Gly Gly Ser Pro Lys Ser Pro
 115 120 125
 Ala Asn Gly Ala Val Thr Leu Pro Ala Pro Pro Pro Pro Val Leu
 130 135 140
 Arg Pro Pro Arg Thr Pro Asn Ala Pro Ala Pro Cys Thr Pro Glu Glu
 145 150 155 160
 Asp Leu Thr Gly Leu Thr Ala Ser Pro Val Pro Ser Pro Thr Ala Asn
 165 170 175
 Gly Leu Ala Ala Asn Asn Asp Ser Pro Gly Ser Gly Ser Gln Ser Gly
 180 185 190
 Arg Lys Ala Lys Asp Pro Glu Arg Gly Leu Phe Pro Gly Pro Gln Lys
 195 200 205
 Ser Ser Ser Glu Gln Lys Leu Pro Leu Gln Arg Leu Pro Ser Gln Glu
 210 215 220
 Asn Glu Leu Leu Glu Asn Pro Ser Val Val Leu Ser Thr Asn Ser Pro
 225 230 235 240
 Ala Ala Leu Lys Val Gly Lys Gln Gln Ile Ile Pro Lys Ser Leu Ala

245	250	255
Ser Glu Ile Lys Ile Ser Lys Ser Asn Asn Gln Asn Val Glu Pro His		
260	265	270
Lys Arg Leu Leu Lys Val Arg Ser Met Val Glu Gly Leu Gly Gly Pro		
275	280	285
Leu Gly His Ala Gly Glu Glu Ser Glu Val Asp Asn Asp Val Asp Ser		
290	295	300
Pro Gly Ser Leu Arg Arg Gly Leu Arg Ser Thr Ser Tyr Arg Arg Ala		
305	310	315
Val Val Ser Gly Phe Asp Phe Asp Ser Pro Thr Ser Ser Lys Lys Lys		
325	330	335
Asn Arg Met Ser Gln Pro Val Leu Lys Val Val Met Glu Asp Lys Glu		
340	345	350
Lys Phe Ser Ser Leu Gly Arg Ile Lys Lys Lys Met Leu Lys Gly Gln		
355	360	365
Gly Thr Phe Asp Gly Glu Glu Asn Ala Val Leu Tyr Gln Asn Tyr Lys		
370	375	380
Glu Lys Ala Leu Asp Ile Asp Ser Asp Glu Glu Ser Glu Pro Lys Glu		
385	390	395
Gln Lys Ser Asp Glu Lys Ile Val Ile His His Lys Pro Leu Arg Ser		
405	410	415
Thr Trp Ser Gln Leu Ser Ala Val Lys Arg Lys Gly Leu Ser Gln Thr		
420	425	430
Val Ser Gln Glu Glu Arg Lys Arg Gln Glu Ala Ile Phe Glu Val Ile		
435	440	445
Ser Ser Glu His Ser Tyr Leu Leu Ser Leu Glu Ile Leu Ile Arg Met		
450	455	460
Phe Lys Asn Ser Lys Glu Leu Ser Asp Thr Met Thr Lys Thr Glu Arg		
465	470	475
480		

His His Leu Phe Ser Asn Ile Thr Asp Val Cys Glu Ala Ser Lys Lys
 485 490 495
 Phe Phe Ile Glu Leu Glu Ala Arg His Gln Asn Asn Ile Phe Ile Asp
 500 505 510
 Asp Ile Ser Asp Ile Val Glu Lys His Thr Ala Ser Thr Phe Asp Pro
 515 520 525
 Tyr Val Lys Tyr Cys Thr Asn Glu Val Tyr Gln Gln Arg Thr Leu Gln
 530 535 540
 Lys Leu Leu Ala Thr Asn Pro Ser Phe Lys Glu Val Leu Ser Arg Ile
 545 550 555 560
 Glu Ser His Glu Asp Cys Arg Asn Leu Pro Met Ile Ser Phe Leu Ile
 565 570 575
 Leu Pro Met Gln Arg Val Thr Arg Leu Pro Leu Leu Met Asp Thr Ile
 580 585 590
 Cys Gln Lys Thr Pro Lys Asp Ser Pro Lys Tyr Glu Val Cys Lys Arg
 595 600 605
 Ala Leu Lys Glu Val Ser Lys Leu Val Arg Leu Cys Asn Glu Gly Ala
 610 615 620
 Arg Lys Met Glu Arg Thr Glu Met Met Tyr Thr Ile Asn Ser Gln Leu
 625 630 635 640
 Glu Phe Lys Ile Lys Pro Phe Pro Leu Val Ser Ser Ser Arg Trp Leu
 645 650 655
 Val Lys Arg Gly Glu Leu Thr Ala Tyr Val Glu Asp Thr Val Leu Phe
 660 665 670
 Ser Arg Arg Thr Ser Lys Gln Gln Val Tyr Phe Phe Leu Phe Asn Asp
 675 680 685
 Val Leu Ile Ile Thr Lys Lys Ser Glu Glu Ser Tyr Asn Val Asn
 690 695 700
 Asp Tyr Ser Leu Arg Asp Gln Leu Leu Val Glu Ser Cys Asp Asn Glu

705	710	715	720
Glu Leu Asn Ser Ser Pro Gly Lys Asn Ser Ser Thr Met Leu Tyr Ser			
725	730	735	
Arg Gln Ser Ser Ala Ser His Leu Phe Thr Leu Thr Val Leu Ser Asn			
740	745	750	
His Ala Asn Glu Lys Val Glu Met Leu Leu Gly Ala Glu Thr Gln Ser			
755	760	765	
Glu Arg Ala Arg Trp Ile Thr Ala Leu Gly His Ser Ser Gly Lys Pro			
770	775	780	
Pro Ala Asp Arg Thr Cys Gly			
785	790		

<210> 3222

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3222

Met Arg Val Ser Met Gln Gln Thr Ala Gln Gly Gly Pro His Gly			
1	5	10	15
Gln Arg Arg Asp Ala Asp Leu Arg Pro Ala Pro Pro Lys Leu Pro Val			
20	25	30	
Gln Met Pro Leu Thr Pro Ser Asn Gln Gln Gln Asp Arg His Cys Val			
35	40	45	
Arg Lys Val Gly Arg His Pro His Pro Cys Thr Ala Ala Ala Thr Pro			
50	55	60	
Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln Lys His His			
65	70	75	80

Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr Ser Leu Pro
 85 90 95
 Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu Ser Val Ser
 100 105 110
 Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val Leu Ala Ser
 115 120 125
 Val Ser Ile Ala Ser Ser Trp Pro Ser Ser Ala Arg Cys Ser Lys Pro
 130 135 140
 Thr Ala Val Glu Ala Asn Val Ile Ala Leu Pro Leu Arg Arg Trp His
 145 150 155 160
 Arg Asp Trp Gln Arg Cys His Leu Gly Val Cys Val Leu Ser Leu Arg
 165 170 175
 Val Gln Ala Ser Pro Ala Pro Ala Val Val Leu Gly Pro Gln Met Arg
 180 185 190
 Asp His Gly His Glu Asp Gln Pro Pro Arg Gln Pro Leu Pro Ser Ser
 195 200 205
 Leu Gly Ser Gly Val Phe
 210

<210> 3223

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3223

Met Ile Phe Lys Phe Pro Ser Ser Phe Leu Val Leu Trp Ser Leu Leu
 1 5 10 15
 Arg Cys Gly Arg Lys Gln Phe Val Ser Cys Ala Glu Gln Phe Arg Ser

20	25	30
Pro Gly Ser Leu Ser Pro Gly Pro Lys Pro Pro Arg Arg Glu Ser Phe		
35	40	45
Ser Gly Pro Trp Glu Gln Val Leu Lys Gly Phe Leu Leu Lys Arg Gly		
50	55	60
Arg Gln Pro Ala Val Arg Val Arg Ile Val Val Val Pro Glu Pro Tyr		
65	70	75
Gly Gln Ser Phe Glu Arg Ile Gly Leu Gly Arg Phe Ser Gly Gln Lys		
85	90	95
Arg Leu Ile Ser Ile Leu Gly Ala Leu Ser His Lys Gly Tyr Leu Ile		
100	105	110
Glu Arg Lys Asn Gly Val Cys Gly Ser Phe Ala Pro Ile Ser Lys Trp		
115	120	125
Val Asp Ser Gly Cys Lys Gly Ile Phe Ser His Phe Ser Gln Gln Arg		
130	135	140
Lys Ala Phe Ser Ala Lys Ile Leu Lys Gly Glu		
145	150	155

<210> 3224

<211> 751

<212> PRT

<213> Homo sapiens

<400> 3224

Met Arg Leu Lys Ile Ser Leu Leu Lys Glu Pro Lys His Gln Glu Leu

1 5 10 15

Val Ser Cys Val Gly Trp Thr Thr Ala Glu Glu Leu Tyr Ser Cys Ser

20 25 30

Asp Asp His Gln Ile Val Lys Trp Asn Leu Leu Thr Ser Glu Thr Thr
 35 40 45
 Gln Ile Val Lys Leu Pro Asp Asp Ile Tyr Pro Ile Asp Phe His Trp
 50 55 60
 Phe Pro Lys Ser Leu Gly Val Lys Gln Thr Gln Ala Glu Ser Phe
 65 70 75 80
 Val Leu Thr Ser Ser Asp Gly Lys Phe His Leu Ile Ser Lys Leu Gly
 85 90 95
 Arg Val Glu Lys Ser Val Glu Ala His Cys Gly Ala Val Leu Ala Gly
 100 105 110
 Arg Trp Asn Tyr Glu Gly Thr Ala Leu Val Thr Val Gly Glu Asp Gly
 115 120 125
 Gln Ile Lys Ile Trp Ser Lys Thr Gly Met Leu Arg Ser Thr Leu Ala
 130 135 140
 Gln Gln Gly Thr Pro Val Tyr Ser Val Ala Trp Gly Pro Asp Ser Glu
 145 150 155 160
 Lys Val Leu Tyr Thr Ala Gly Lys Gln Leu Ile Ile Lys Pro Leu Gln
 165 170 175
 Pro Asn Ala Lys Val Leu Gln Trp Lys Ala His Asp Gly Ile Ile Leu
 180 185 190
 Lys Val Asp Trp Asn Ser Val Asn Asp Leu Ile Leu Ser Ala Gly Glu
 195 200 205
 Asp Cys Lys Tyr Lys Val Trp Asp Ser Tyr Gly Arg Pro Leu Tyr Asn
 210 215 220
 Ser Gln Pro His Glu His Pro Ile Thr Ser Val Ala Trp Ala Pro Asp
 225 230 235 240
 Gly Glu Leu Phe Ala Val Gly Ser Phe His Thr Leu Arg Leu Cys Asp
 245 250 255
 Lys Thr Gly Trp Ser Tyr Ala Leu Glu Lys Pro Asn Thr Gly Ser Ile

260	265	270
Phe Asn Ile Ala Trp Ser Ile Asp Gly Thr Gln Ile Ala Gly Ala Cys		
275	280	285
Gly Asn Gly His Val Val Phe Ala His Val Val Glu Gln His Trp Glu		
290	295	300
Trp Lys Asn Phe Gln Val Thr Leu Thr Lys Arg Arg Ala Met Gln Val		
305	310	315
Arg Asn Val Leu Asn Asp Ala Val Asp Leu Leu Glu Phe Arg Asp Arg		
325	330	335
Val Ile Lys Ala Ser Leu Asn Tyr Ala His Leu Val Val Ser Thr Ser		
340	345	350
Leu Gln Cys Tyr Val Phe Ser Thr Lys Asn Trp Asn Thr Pro Ile Ile		
355	360	365
Phe Asp Leu Lys Glu Gly Thr Val Ser Leu Ile Leu Gln Ala Glu Arg		
370	375	380
His Phe Leu Leu Val Asp Gly Ser Ser Ile Tyr Leu Tyr Ser Tyr Glu		
385	390	395
Gly Arg Phe Ile Ser Ser Pro Lys Phe Pro Gly Met Arg Thr Asp Ile		
405	410	415
Leu Asn Ala Gln Thr Val Ser Leu Ser Asn Asp Thr Ile Ala Ile Arg		
420	425	430
Asp Lys Ala Asp Glu Lys Ile Ile Phe Leu Phe Glu Ala Ser Thr Gly		
435	440	445
Lys Pro Leu Gly Asp Gly Lys Phe Leu Ser His Lys Asn Glu Ile Leu		
450	455	460
Glu Ile Ala Leu Asp Gln Lys Gly Leu Thr Asn Asp Arg Lys Ile Ala		
465	470	475
Phe Ile Asp Lys Asn Arg Asp Leu Cys Ile Thr Ser Val Lys Arg Phe		
485	490	495

Gly Lys Glu Glu Gln Ile Ile Lys Leu Gly Thr Met Val His Thr Leu
 500 505 510
 Ala Trp Asn Asp Thr Cys Asn Ile Leu Cys Gly Leu Gln Asp Thr Arg
 515 520 525
 Phe Ile Val Trp Tyr Tyr Pro Asn Thr Val Tyr Val Asp Arg Asp Ile
 530 535 540
 Leu Pro Lys Thr Leu Tyr Glu Arg Asp Ala Ser Glu Phe Ser Lys Asn
 545 550 555 560
 Pro His Ile Val Ser Phe Val Gly Asn Gln Val Thr Ile Arg Arg Ala
 565 570 575
 Asp Gly Ser Leu Val His Ile Ser Ile Pro Pro Tyr Pro Ala Ile Leu
 580 585 590
 His Glu Tyr Val Ser Ser Lys Trp Glu Asp Ala Val Arg Leu Cys
 595 600 605
 Arg Phe Val Lys Glu Gln Thr Met Trp Ala Cys Leu Ala Ala Met Ala
 610 615 620
 Val Ala Asn Arg Asp Met Thr Thr Ala Glu Ile Ala Tyr Ala Ala Ile
 625 630 635 640
 Gly Glu Ile Asp Lys Val Gln Tyr Ile Asn Ser Ile Lys Asn Leu Pro
 645 650 655
 Ser Lys Glu Ser Lys Met Ala His Ile Leu Leu Phe Ser Gly Asn Ile
 660 665 670
 Gln Glu Ala Glu Ile Val Leu Leu Gln Ala Gly Leu Val Tyr Gln Ala
 675 680 685
 Ile Gln Ile Asn Ile Asn Leu Tyr Asn Trp Glu Arg Ala Leu Glu Leu
 690 695 700
 Ala Val Lys Tyr Lys Thr His Val Asp Thr Val Leu Ala Tyr Arg Gln
 705 710 715 720
 Lys Phe Leu Glu Thr Phe Gly Lys Gln Glu Thr Asn Lys Arg Tyr Leu

725 730 735

His Tyr Ala Glu Gly Leu Gln Ile Asp Trp Glu Lys Ile Lys Ala

740 745 750

<210> 3225

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3225

Met Gly Leu Lys Ser His Val Leu Pro Ala Pro Asn Ser Gln Gly Gln

1 5 10 15

Gly Ser Leu Cys Ile Phe Val Tyr Val Thr Ser Tyr Met Asp Tyr Ile

20 25 30

Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly Leu Asn Lys Gln

35 40 45

Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp Gly Trp Leu Met

50 55 60

Val Leu Val Gln Gln Leu His Gly Gly Arg Gly His Val Leu Asp Pro

65 70 75 80

Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser Gln Asp Gly Cys

85 90 95

Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg Arg Gly Gly Gly

100 105 110

Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe Tyr Gln Lys Val

115 120 125

Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro Leu His Ile Phe

130 135 140

Thr

145

<210> 3226

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3226

Met Ala Phe Gly Glu Pro Pro Ser Gly His Ser Thr Arg His Arg Thr

1 5 10 15

Leu His Gly Leu Ser Phe His Thr Ala Met Gly Met Ala Trp Ser Leu

20 25 30

His Tyr Gln Gly Gln Gly Gly Thr Leu Cys Leu Val Gly Val Ser Thr

35 40 45

Pro Ser His Asp Lys Ala Val Leu Gln Gly Leu Pro His Phe Ser Val

50 55 60

Asn Leu Gly Val Gln Pro Ser Ala Leu Ala Gly Arg Arg Gly Asp Ala

65 70 75 80

Ser Cys Pro Ser Ser Trp Arg Ser Ala Asp Pro Thr Val Ser Pro Asn

85 90 95

Leu Gly Ala Pro Gly Gly Pro Asn Ala Ile Asp Ala Leu His Gly Glu

100 105 110

Gln Leu Gly Leu Phe Leu Arg Thr Lys Met Gly Arg Asp Pro Lys Asp

115 120 125

Val His Gly Leu Thr Pro Ala Leu Cys Gly Pro Cys Leu Ala Gly Leu

130 135 140

Pro Ser Ser His Ser Pro Gln Phe Ser Cys Asn Thr Ala Pro Leu Lys

145

150

155

160

Met Leu Ser

<210> 3227

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3227

Met Leu Ser Phe Ser Arg Asp Arg Leu Pro Ser Gly Arg Arg Val Ser

1

5

10

15

Gly Lys Cys Pro Pro Pro Leu Gly Met Ala Val Gly Arg Gly Gly

20

25

30

Ser Gly Cys Pro Glu Glu Gly Ser Gly Arg Lys Leu Glu Leu Leu Glu

35

40

45

Ser Gln Leu Pro Ala Glu Arg Ala Arg Glu Glu Ala Gly Pro Ser Val

50

55

60

Arg Arg Pro Arg Asp Lys Leu His Lys Pro Lys Ala Thr Gln Thr Glu

65

70

75

80

Val Lys Pro Ser Val Arg Phe Asn Leu Arg Thr Ser Lys Asp Pro Glu

85

90

95

His Glu Gly Cys Tyr Leu Ser Val Gly His Ser Gln Pro Leu Glu Asp

100

105

110

Cys Ser Phe Asn Met Thr Ala Lys Thr Phe Phe Ile Ile His Gly Trp

115

120

125

Thr Met Ser Gly Ile Phe Glu Asn Trp Leu His Lys Leu Val Ser Ala

130

135

140

Leu His Thr Arg Glu Lys Asp Ala Asn Val Val Val Val Asp Trp Leu
 145 150 155 160
 Pro Leu Ala His Gln Leu Tyr Thr Asp Ala Val Asn Asn Thr Arg Val
 165 170 175
 Val Gly His Ser Ile Ala Arg Met Leu Asp Trp Leu Gln Glu Lys Asp
 180 185 190
 Asp Phe Ser Leu Gly Asn Val His Leu Ile Gly Tyr Ser Leu Gly Ala
 195 200 205
 His Val Ala Gly Tyr Ala Gly Asn Phe Val Lys Gly Thr Val Gly Arg
 210 215 220
 Ile Thr Gly Leu Asp Pro Ala Gly Pro Met Phe Glu Gly Ala Asp Ile
 225 230 235 240
 His Lys Arg Leu Ser Pro Asp Asp Ala Asp Phe Val Asp Val Leu His
 245 250 255
 Thr Tyr Thr Arg Ser Phe Gly Leu Ser Ile Gly Ile Gln Met Pro Val
 260 265 270
 Gly His Ile Asp Ile Tyr Pro Asn Gly Gly Asp Phe Gln Pro Gly Cys
 275 280 285
 Gly Leu Asn Asp Val Leu Gly Ser Ile Ala Tyr Gly Thr Ile Thr Glu
 290 295 300
 Val Val Lys Cys Glu His Glu Arg Ala Val His Leu Phe Val Asp Ser
 305 310 315 320
 Leu Val Asn Gln Asp Lys Pro Ser Phe Ala Phe Gln Cys Thr Asp Ser
 325 330 335
 Asn Arg Phe Lys Lys Gly Ile Cys Leu Ser Cys Arg Lys Asn Arg Cys
 340 345 350
 Asn Ser Ile Gly Tyr Asn Ala Lys Lys Met Arg Asn Lys Arg Asn Ser
 355 360 365
 Lys Met Tyr Leu Lys Thr Arg Ala Gly Met Pro Phe Arg Gly Asn Leu

370 375 380

Gln Ser Leu Glu Cys Pro

385 390

<210> 3228

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3228

Met Val Ser Cys Leu Val Glu Gly Leu Lys Lys Ala Ala Tyr Lys Val

1 5 10 15

Val Asn Tyr Asp Lys Pro Lys Glu Ala Thr Gln Gly Lys Asp Glu Asn

20 25 30

Pro Ala Gln Phe Met Ala Arg Leu Val Ala Thr Leu Arg Arg Phe Thr

35 40 45

Ala Leu Asp Pro Glu Gly Pro Glu Gly Cys Leu Ile Leu Asn Met His

50 55 60

Phe Ile Ile Gln Ser Ala Pro Asp Ile Arg Lys Lys Phe Gln Lys Leu

65 70 75 80

Asp Ser Ser Pro Gln Thr Pro Gln Gln Asp Leu Ile Asn Leu Ala Phe

85 90 95

Lys Val Phe Asn Asn Arg Glu Glu Thr Ala Lys

100 105

<210> 3229

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3229

Met Ser Arg Glu Phe Arg Gly His Arg Asn Cys Val Leu Thr Leu Ala
 1 5 10 15
 Tyr Ser Ala Pro Trp Asp Leu Pro Ser Thr Pro Cys Ala Glu Glu Ala
 20 25 30
 Ala Ala Gly Gly Leu Leu Val Thr Gly Ser Thr Asp Gly Thr Ala Lys
 35 40 45
 Val Trp Gln Val Ala Ser Gly Cys Cys His Gln Thr Leu Arg Gly His
 50 55 60
 Thr Gly Ala Val Leu Cys Leu Val Asp Thr Pro Gly His Thr Ala
 65 70 75 80
 Phe Thr Gly Ser Thr Asp Ala Thr Ile Arg Ala Trp Asp Ile Leu Ser
 85 90 95
 Gly Glu Gln Leu Arg Val Phe Arg Glu His Arg Gly Ser Val Ile Cys
 100 105 110
 Leu Glu Cys Ser Arg Ala Ala Gly Thr Leu Ala Pro Gly Pro Ser Thr
 115 120 125
 Arg Ser Leu Glu Ser Cys Gly Gly Cys Ser Gly Ala Thr His Ser Ser
 130 135 140
 Ser Thr Ala Ser Arg Cys Thr Ala Arg Cys Ser Thr Pro Pro Arg Thr
 145 150 155 160
 Thr Ala Pro Cys Ala Ser Gly Thr Cys Ala Gly Ser Glu Val Pro Arg
 165 170 175
 Gly Pro Leu Arg Pro Arg Ala Ala Ser Arg Gly Ser Ser Ala Thr Arg
 180 185 190
 Trp Ala Ala Pro Pro Arg Pro Cys Ser Arg Pro Asp Pro Ala Gly Pro

195	200	205	
Leu Gln Thr Pro Ala Gln Thr Pro Ser Gly Ser Gln Ser Ala Pro Pro			
210	215	220	
Cys Tyr Pro Arg Trp Trp Arg Pro Met Ala Gly Glu Gly Arg Gly Ala			
225	230	235	240
Arg Lys Pro Gly Arg Glu Glu Ser Pro Ser Gln Ala Ser Gly Phe Ser			
245	250	255	
Leu Val Ala Arg Arg Trp Glu Arg Glu Cys Ser Pro Trp Gly Pro			
260	265	270	
Pro Pro Phe Pro Phe			
275			

<210> 3230

<211> 586

<212> PRT

<213> Homo sapiens

<400> 3230

Met Lys Tyr Ile Leu Val Thr Gly Gly Val Ile Ser Gly Ile Gly Lys			
1	5	10	15
Gly Ile Ile Ala Ser Ser Ile Gly Thr Ile Leu Lys Ser Cys Gly Leu			
20	25	30	
Arg Val Thr Ala Ile Lys Ile Asp Pro Tyr Ile Asn Ile Asp Ala Gly			
35	40	45	
Thr Phe Ser Pro Tyr Glu His Gly Glu Val Phe Val Leu Asn Asp Gly			
50	55	60	
Gly Glu Val Asp Leu Asp Leu Gly Asn Tyr Glu Arg Phe Leu Asp Ile			
65	70	75	80

Asn Leu Tyr Lys Asp Asn Asn Ile Thr Thr Gly Lys Ile Tyr Gln His
 85 90 95
 Val Ile Asn Lys Glu Arg Arg Gly Asp Tyr Leu Gly Lys Thr Val Gln
 100 105 110
 Val Val Pro His Ile Thr Asp Ala Val Gln Glu Trp Val Met Asn Gln
 115 120 125
 Ala Lys Val Pro Val Asp Gly Asn Lys Glu Glu Pro Gln Ile Cys Val
 130 135 140
 Ile Glu Leu Gly Gly Thr Ile Gly Asp Ile Glu Gly Met Pro Phe Val
 145 150 155 160
 Glu Ala Phe Arg Gln Phe Lys Ala Lys Arg Glu Asn Phe Cys
 165 170 175
 Asn Ile His Val Ser Leu Val Pro Gln Leu Ser Ala Thr Gly Glu Gln
 180 185 190
 Lys Thr Lys Pro Thr Gln Asn Ser Val Arg Ala Leu Arg Gly Leu Gly
 195 200 205
 Leu Ser Pro Asp Leu Ile Val Cys Arg Ser Ser Thr Pro Ile Glu Met
 210 215 220
 Ala Val Lys Glu Lys Ile Ser Met Phe Cys His Val Asn Pro Glu Gln
 225 230 235 240
 Val Ile Cys Ile His Asp Val Ser Ser Thr Tyr Arg Val Pro Val Leu
 245 250 255
 Leu Glu Glu Gln Ser Ile Val Lys Tyr Phe Lys Glu Arg Leu His Leu
 260 265 270
 Pro Ile Gly Asp Ser Ala Ser Asn Leu Leu Phe Lys Trp Arg Asn Met
 275 280 285
 Ala Asp Arg Tyr Glu Arg Leu Gln Lys Ile Cys Ser Ile Ala Leu Val
 290 295 300
 Gly Lys Tyr Thr Lys Leu Arg Asp Cys Tyr Ala Ser Val Phe Lys Ala

305	310	315	320
Leu Glu His Ser Ala Leu Ala Ile Asn His Lys Leu Asn Leu Met Tyr			
325	330	335	
Ile Asp Ser Ile Asp Leu Glu Lys Ile Thr Glu Thr Glu Asp Pro Val			
340	345	350	
Lys Phe His Glu Ala Trp Gln Lys Leu Cys Lys Ala Asp Gly Ile Leu			
355	360	365	
Val Pro Gly Gly Phe Gly Ile Arg Gly Thr Leu Gly Lys Leu Gln Ala			
370	375	380	
Ile Ser Trp Ala Arg Thr Lys Lys Ile Pro Phe Leu Gly Val Cys Leu			
385	390	395	400
Gly Met Gln Leu Ala Val Ile Glu Phe Ala Arg Asn Cys Leu Asn Leu			
405	410	415	
Lys Asp Ala Asp Ser Thr Glu Phe Arg Pro Asn Ala Pro Val Pro Leu			
420	425	430	
Val Ile Asp Met Pro Glu His Asn Pro Gly Asn Leu Gly Gly Thr Met			
435	440	445	
Arg Leu Gly Ile Arg Arg Thr Val Phe Lys Thr Glu Asn Ser Ile Leu			
450	455	460	
Arg Lys Leu Tyr Gly Asp Val Pro Phe Ile Glu Glu Arg His Arg His			
465	470	475	480
Arg Phe Glu Val Asn Pro Asn Leu Ile Lys Gln Phe Glu Gln Asn Asp			
485	490	495	
Leu Ser Phe Val Gly Gln Asp Val Asp Gly Asp Arg Met Glu Ile Ile			
500	505	510	
Glu Leu Ala Asn His Pro Tyr Phe Val Gly Val Gln Phe His Pro Glu			
515	520	525	
Phe Ser Ser Arg Pro Met Lys Pro Ser Pro Pro Tyr Leu Gly Leu Leu			
530	535	540	

Leu Ala Ala Thr Gly Asn Leu Asn Ala Tyr Leu Gln Gln Gly Cys Lys
 545 550 555 560
 Leu Ser Ser Ser Asp Arg Tyr Ser Asp Ala Ser Asp Asp Ser Phe Ser
 565 570 575
 Glu Pro Arg Ile Ala Glu Leu Glu Ile Ser
 580 585

<210> 3231

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3231

Met Asn Ile Ile Thr Ser Pro Leu Pro Gly Ser Pro Asn Ser Leu Arg

1 5 10 15

Gly Ser Thr Phe Met Leu Gly Ser Ser Leu Glu Ala Ser Leu Gly Lys
 20 25 30Leu Gln Ser Gln Pro Ser Thr Ser Thr Cys Ser Pro Ser Pro Val Lys
 35 40 45Val Asn Lys Val Arg Val Ser Leu Glu Ala Arg Arg Leu Arg Val Gly
 50 55 60Val Glu Arg Ser His Ser Gln Ser Cys Leu Val Tyr Leu Ser Val Met
 65 70 75 80Lys Lys Arg Glu Glu Thr Asn Lys Met Glu Arg Val Glu Ala Arg Pro
 85 90 95Ser Thr Cys Phe Leu Gly Glu Leu Gly His Ser Gly Gln His Arg Arg
 100 105 110

Val Pro Gly Leu Lys Lys Ile Asp His Gln Gln Gly Gln Gly Val Val

115 120 125

Thr Glu Lys Gly Ala Thr Pro Trp Val Asn Lys Gln

130 135 140

<210> 3232

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3232

Met Phe Phe Ile Phe Gln Lys Glu Lys Ala Leu Lys Ile Phe Leu Lys

1 5 10 15

Cys Asp Cys His Leu Phe Ser Thr Lys Asn Phe Leu Arg Phe Phe Lys

20 25 30

Arg Lys Ile Glu Ile Leu Ser Leu Pro Arg Phe Pro Ser Pro Pro Val

35 40 45

Phe Lys Met Lys Ala Gln Val Gln Glu Trp Gly Ala Gln Val Pro Gly

50 55 60

Val Tyr Thr Pro Pro Thr Gln Leu Arg Pro Ala Leu Ala Glu Gly Asp

65 70 75 80

Ala Val Leu Ser Ser Gln Pro Arg Glu Ala Ser Phe Ser Thr Ser Asn

85 90 95

Pro Thr Ala Met Asn Val Asn Ser Leu Gly Cys Phe Gln Lys Gln Glu

100 105 110

Ser Ala

<210> 3233

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3233

Met Glu Ile His His Phe Leu Leu Lys Lys Arg Lys Gln Ala Asn Leu

1

5

10

15

Ala Gln Leu Leu Arg Asp Ser Gln Asp Arg Asn Lys His Leu Gly Glu

20

25

30

Glu Ile Lys Glu Leu Gln Gln Arg Leu Gly Glu Val Gln Gly Asp Asn

35

40

45

Lys Leu Leu Arg Met Thr Ile Ala Lys Gln Arg Leu Gly Asp Glu Ala

50

55

60

Ile Gly Val Arg His Phe Ala Ala His Glu Arg Glu Asp Leu Val Gln

65

70

75

80

Gln Leu Glu Arg Ala Lys Glu Gln Ile Glu Ser Leu Glu His Asp Leu

85

90

95

Gln Ala Ser Val Asp Glu Leu Gln Asp Val Lys Glu Glu Arg Ser Ser

100

105

110

Tyr Gln Asp Lys Val Glu Arg Leu Asn Gln Glu Leu Asn His Ile Leu

115

120

125

Ser Gly His Glu Asn Arg Ile Ile Asp Val Asp Ala Leu Cys Met Glu

130

135

140

Asn Arg Tyr Leu Gln Glu Arg Leu Lys Gln Leu His Glu Glu Val Asn

145

150

155

160

Leu Leu Lys Ser Asn Ile Ala Lys Tyr Lys Asn Ala Leu Glu Arg Arg

165

170

175

Lys Asn Ser Lys Gly Gln Gly Lys Ser Ser Ser Ser Ala Leu Thr Gly

180	185	190
Val Leu Ser Ala Lys Gln Val Gln Asp Leu Leu Ser Glu Asp His Gly		
195	200	205
Cys Ser Leu Pro Ala Thr Pro Gln Ser Ile Ser Asp Leu Lys Ser Leu		
210	215	220
Ala Thr Ala Leu Leu Glu Thr Ile His Glu Lys Asn Met Val Ile Gln		
225	230	235
His Gln Arg Gln Thr Asn Lys Ile Leu Gly Asn Arg Val Ala Glu Leu		
245	250	255
Glu Lys Lys Leu Arg Thr Leu Glu Val Ser Gly Leu Trp Ser Leu Pro		
260	265	270
Gly Gly Lys Asp Thr Ile Leu Phe Ser Asp Pro Thr Leu Pro Ser Gly		
275	280	285
Gln Arg Ser Arg Ser Pro Leu Leu Lys Phe Val Glu Gln Pro Thr Glu		
290	295	300
Asn Lys Ala Asp Pro Lys Asp Gly Glu Ala Gln Lys Gln Glu Glu Asp		
305	310	315
Glu Ser Cys Ala Ala Ala Glu Ala Leu Thr Ala Pro Glu Asp Ala Gly		
325	330	335
Arg Pro Ala Val Asn Ser Pro Ala Asn Gln Ser Arg Gly Asn Gln Cys		
340	345	350
Lys Leu Phe His Pro Ser Leu Pro Gln Leu Pro Ser Glu Glu Val		
355	360	365
Asn Ser Leu Gly Arg Glu Ile Ile Lys Leu Thr Lys Glu Gln Ala Ala		
370	375	380
Ala Glu Leu Glu Glu Val Arg Arg Glu Ser Pro Ile Glu Gly Gln Arg		
385	390	395
Ser Glu Thr Gly Pro Ala Pro Pro Gly Leu Ala Ile Gln Gly Glu Leu		
405	410	415

Pro Lys Ser His Leu Asp Ser Phe Glu Ala Ser Arg Pro Ala Ala Lys
 420 425 430
 Ala Ser Thr Pro Glu Asp Gly Lys Gly Ile Pro Glu Gly Gly Met
 435 440 445
 Arg Ser Thr Val Lys Thr
 450

<210> 3234

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3234

Met Thr Asp Leu Asn Lys His Ile Lys Gln Ala Gln Thr Gln Arg Lys
 1 5 10 15

Gln Leu Leu Glu Glu Ser Arg Glu Leu His Arg Glu Lys Leu Leu Val
 20 25 30

Gln Ala Glu Asn Arg Phe Phe Leu Glu Tyr Leu Thr Asn Lys Thr Glu
 35 40 45

Glu Tyr Thr Glu Gln Pro Glu Lys Val Trp Asn Ser Tyr Leu Gln Lys
 50 55 60

Ser Gly Glu Ile Glu Arg Arg Gln Glu Ser Ala Ser Arg Tyr Ala
 65 70 75 80

Glu Gln Ile Ser Val Leu Lys Thr Ala Leu Leu Gln Lys Glu Asn Ile
 85 90 95

Gln Ser Ser Leu Lys Arg Lys Leu Gln Ala Met Arg Asp Ile Ala Ile
 100 105 110

Leu Lys Glu Lys Gln Glu Lys Glu Ile Gln Thr Leu Gln Glu Glu Thr

115	120	125
Lys Lys Val Gln Ala Glu Thr Ala Ser Lys Thr Arg Glu Val Gln Ala		
130	135	140
Gln Leu Leu Gln Glu Lys Arg Leu Leu Glu Lys Gln Leu Ser Glu Pro		
145	150	155
Asp Arg Arg Leu Leu Gly Lys Arg Lys Arg Arg Glu Leu Asn Met Lys		
165	170	175
Ala Gln Ala Leu Lys Leu Ala Ala Lys Arg Phe Ile Phe Glu Tyr Ser		
180	185	190
Cys Gly Ile Asn Arg Glu Asn Gln Gln Phe Lys Lys Glu Leu Leu Gln		
195	200	205
Leu Ile Glu Gln Ala Gln Lys Leu Thr Ala Thr Gln Ser His Leu Glu		
210	215	220
Asn Arg Lys Gln Gln Leu Gln Gln Glu Gln Trp Tyr Leu Glu Ser Leu		
225	230	235
Ile Gln Ala Arg Gln Arg Leu Gln Gly Ser His Asn Gln Cys Leu Asn		
245	250	255
Arg Gln Asp Val Pro Lys Thr Thr Pro Ser Leu Pro Gln Gly Thr Lys		
260	265	270
Ser Arg Ile Asn Pro Lys		
275		

<210> 3235

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3235

Met Arg His Arg Ala Gln Gln Thr Gln Lys Phe Lys Ala Ala Tyr Ala
 1 5 10 15
 Tyr Asn Leu Met Gly Ser Leu Ser His Glu Phe Arg Tyr Ser Phe Val
 20 25 30
 Arg Val Leu Trp Phe Arg Ile Ser His Lys Ala Val Ile Lys Leu Leu
 35 40 45
 Ala Arg Thr Gly Val Ser Ser Glu Val Gln Met Glu Glu Asp Ser Leu
 50 55 60
 Leu Gln Arg Thr Asp Gly Gly Thr Gln Phe Leu Glu Val Gly Gln Thr
 65 70 75 80
 Ala Ala Ala Leu Cys Ser Leu Pro Cys Gly Pro Leu Arg Tyr Asp His
 85 90 95
 Leu Leu Cys Glu Ser Val Gln Ser Ser Arg Ala Thr Glu Arg Ala Cys
 100 105 110

<210> 3236

<211> 655

<212> PRT

<213> Homo sapiens

<400> 3236

Met Pro Leu Lys Trp Lys Thr Ser Ser Pro Ala Ile Trp Arg Phe Pro
 1 5 10 15
 Val Pro Val Pro Lys Thr Ser Arg Ser Thr Pro Leu Ser Pro Ala Tyr
 20 25 30
 Ile Ser Leu Val Glu Glu Asp Gln His Met Lys Leu Ser Leu Gly
 35 40 45
 Gly Ser Glu Met Gly Leu Ser Ser His Leu Gln Ser Ser Lys Ala Gly

50	55	60
Pro Thr Arg Ile Phe Thr Ser Asn Thr His Ser Ser Val Val Leu Gln		
65	70	75
Gly Phe Asp Gln Leu Arg Leu Glu Gly Leu Leu Cys Asp Val Thr Leu		
85	90	95
Met Pro Gly Asp Thr Asp Asp Ala Phe Pro Val His Arg Val Met Met		
100	105	110
Ala Ser Ala Ser Asp Tyr Phe Lys Ala Met Phe Thr Gly Gly Met Lys		
115	120	125
Glu Gln Asp Leu Met Cys Ile Lys Leu His Gly Val Ser Lys Val Gly		
130	135	140
Leu Arg Lys Ile Ile Asp Phe Ile Tyr Thr Ala Lys Leu Ser Leu Asn		
145	150	155
Met Asp Asn Leu Gln Asp Thr Leu Glu Ala Ala Ser Phe Leu Gln Ile		
165	170	175
Leu Pro Val Leu Asp Phe Cys Lys Val Phe Leu Ile Ser Gly Val Thr		
180	185	190
Leu Asp Asn Cys Val Glu Val Gly Arg Ile Ala Asn Thr Tyr Asn Leu		
195	200	205
Thr Glu Val Asp Lys Tyr Val Asn Ser Phe Val Leu Lys Asn Phe Pro		
210	215	220
Ala Leu Leu Ser Thr Gly Glu Phe Leu Lys Leu Pro Phe Glu Arg Leu		
225	230	235
Ala Phe Val Leu Ser Ser Asn Ser Leu Lys His Cys Thr Glu Leu Glu		
245	250	255
Leu Phe Lys Ala Thr Cys Arg Trp Leu Arg Leu Glu Glu Pro Arg Met		
260	265	270
Asp Phe Ala Ala Lys Leu Met Lys Asn Ile Arg Phe Pro Leu Met Thr		
275	280	285

Pro Gln Glu Leu Ile Asn Tyr Val Gln Thr Val Asp Phe Met Arg Thr
 290 295 300
 Asp Asn Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr Gln Met
 305 310 315 320
 Met Pro Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile Arg
 325 330 335
 Ser Asp Thr Thr His Leu Val Thr Leu Gly Gly Val Leu Arg Gln Arg
 340 345 350
 Leu Val Val Ser Lys Glu Leu Arg Met Tyr Asp Glu Lys Ala His Glu
 355 360 365
 Trp Lys Ser Leu Ala Pro Met Asp Ala Pro Arg Tyr Gln His Gly Ile
 370 375 380
 Ala Val Ile Gly Asn Phe Leu Tyr Val Val Gly Gly Gln Ser Asn Tyr
 385 390 395 400
 Asp Thr Lys Gly Lys Thr Ala Val Asp Thr Val Phe Arg Phe Asp Pro
 405 410 415
 Arg Tyr Asn Lys Trp Met Gln Val Ala Ser Leu Asn Glu Lys Arg Thr
 420 425 430
 Phe Phe His Leu Ser Ala Leu Lys Gly Tyr Leu Tyr Ala Val Gly Gly
 435 440 445
 Arg Asn Ala Ala Gly Glu Leu Pro Thr Val Glu Cys Tyr Asn Pro Arg
 450 455 460
 Thr Asn Glu Trp Thr Tyr Val Ala Lys Met Ser Glu Pro His Tyr Gly
 465 470 475 480
 His Ala Gly Thr Val Tyr Gly Val Met Tyr Ile Ser Gly Gly Ile
 485 490 495
 Thr His Asp Thr Phe Gln Lys Glu Leu Met Cys Phe Asp Pro Asp Thr
 500 505 510
 Asp Lys Trp Ile Gln Lys Ala Pro Met Thr Thr Val Arg Gly Leu His

515	520	525
Cys Met Cys Thr Val Gly Glu Arg Leu Tyr Val Ile Gly Gly Asn His		
530	535	540
Phe Arg Gly Thr Ser Asp Tyr Asp Asp Val Leu Ser Cys Glu Tyr Tyr		
545	550	555
Ser Pro Ile Leu Asp Gln Trp Thr Pro Ile Ala Ala Met Leu Arg Gly		
565	570	575
Gln Ser Asp Val Gly Val Ala Val Phe Glu Asn Lys Ile Tyr Val Val		
580	585	590
Gly Gly Tyr Ser Trp Asn Asn Arg Cys Met Val Glu Ile Val Gln Lys		
595	600	605
Tyr Asp Pro Asp Lys Asp Glu Trp His Lys Val Phe Asp Leu Pro Glu		
610	615	620
Ser Leu Gly Gly Ile Arg Ala Cys Thr Leu Thr Val Phe Pro Pro Glu		
625	630	635
Glu Thr Thr Pro Ser Pro Ser Arg Glu Ser Pro Leu Ser Ala Pro		
645	650	655

<210> 3237

<211> 608

<212> PRT

<213> Homo sapiens

<400> 3237

Met Leu Leu Leu Glu Thr Gly Met Lys Glu Glu Gly Leu Phe Arg Ile			
1	5	10	15
Gly Ala Gly Ala Ser Lys Leu Lys Lys Leu Lys Ala Ala Leu Asp Cys			
20	25	30	

Ser Thr Ser His Leu Asp Glu Phe Tyr Ser Asp Pro His Ala Val Ala
 35 40 45
 Gly Ala Leu Lys Ser Tyr Leu Arg Glu Leu Pro Glu Pro Leu Met Thr
 50 55 60
 Phe Asn Leu Tyr Glu Glu Trp Thr Gln Val Ala Ser Val Gln Asp Gln
 65 70 75 80
 Asp Lys Lys Leu Gln Asp Leu Trp Arg Thr Cys Gln Lys Leu Pro Pro
 85 90 95
 Gln Asn Phe Val Asn Phe Arg Tyr Leu Ile Lys Phe Leu Ala Lys Leu
 100 105 110
 Ala Gln Thr Ser Asp Val Asn Lys Met Thr Pro Ser Asn Ile Ala Ile
 115 120 125
 Val Leu Gly Pro Asn Leu Leu Trp Ala Arg Asn Glu Gly Thr Leu Ala
 130 135 140
 Glu Met Ala Ala Ala Thr Ser Val His Val Val Ala Val Ile Glu Pro
 145 150 155 160
 Ile Ile Gln His Ala Asp Trp Phe Phe Pro Glu Glu Val Glu Phe Asn
 165 170 175
 Val Ser Glu Ala Phe Val Pro Leu Thr Thr Pro Ser Ser Asn His Ser
 180 185 190
 Phe His Thr Gly Asn Asp Ser Asp Ser Gly Thr Leu Glu Arg Lys Arg
 195 200 205
 Pro Ala Ser Met Ala Val Met Glu Gly Asp Leu Val Lys Lys Glu Ser
 210 215 220
 Phe Gly Val Lys Leu Met Asp Phe Gln Ala His Arg Arg Gly Gly Thr
 225 230 235 240
 Leu Asn Arg Lys His Ile Ser Pro Ala Phe Gln Pro Pro Leu Pro Pro
 245 250 255
 Thr Asp Gly Ser Thr Val Val Pro Ala Gly Pro Glu Pro Pro Gln

260	265	270
Ser Ser Arg Ala Glu Ser Ser Gly Gly Thr Val Pro Ser Ser		
275	280	285
Ala Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly Asp Gly Cys Pro Pro		
290	295	300
Lys Pro Lys Asp Pro Val Ser Ala Ala Val Pro Ala Pro Gly Arg Asn		
305	310	315
Asn Ser Gln Ile Ala Ser Gly Gln Asn Gln Pro Gln Ala Ala Gly		
325	330	335
Ser His Gln Leu Ser Met Gly Gln Pro His Asn Ala Ala Gly Pro Ser		
340	345	350
Pro His Thr Leu Arg Arg Ala Val Lys Lys Pro Ala Pro Ala Pro Pro		
355	360	365
Lys Pro Gly Asn Pro Pro Pro Gly His Pro Gly Gly Gln Ser Ser Ser		
370	375	380
Gly Thr Ser Gln His Pro Pro Ser Leu Ser Pro Lys Pro Pro Thr Arg		
385	390	395
Ser Pro Ser Pro Pro Thr Gln His Thr Gly Gln Pro Pro Gly Gln Pro		
405	410	415
Ser Ala Pro Ser Gln Leu Ser Ala Pro Arg Arg Tyr Ser Ser Ser Leu		
420	425	430
Ser Pro Ile Gln Ala Pro Asn His Pro Pro Pro Gln Pro Pro Thr Gln		
435	440	445
Ala Thr Pro Leu Met His Thr Lys Pro Asn Ser Gln Gly Pro Pro Asn		
450	455	460
Pro Met Ala Leu Pro Ser Glu His Gly Leu Glu Gln Pro Ser His Thr		
465	470	475
Pro Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro Pro Leu Gly Lys Gln		
485	490	495

Asn Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala Gly Gly Asn Pro Glu
 500 505 510
 Thr Ala Gln Pro His Ala Gly Thr Leu Pro Arg Pro Arg Pro Val Pro
 515 520 525
 Lys Pro Arg Asn Arg Pro Ser Val Pro Pro Pro Gln Pro Pro Gly
 530 535 540
 Val His Ser Ala Gly Asp Ser Ser Leu Thr Asn Thr Ala Pro Thr Ala
 545 550 555 560
 Ser Lys Ile Val Thr Asp Ser Asn Ser Arg Val Ser Glu Pro His Arg
 565 570 575
 Ser Ile Phe Pro Glu Met His Ser Asp Ser Ala Ser Lys Asp Val Pro
 580 585 590
 Gly Arg Ile Leu Leu Asp Ile Asp Asn Asp Thr Glu Ser Thr Ala Leu
 595 600 605

<210> 3238

<211> 510

<212> PRT

<213> Homo sapiens

<400> 3238

Met Val Ala Arg Val Gly Leu Leu Leu Arg Ala Leu Gln Leu Leu Leu
 1 5 10 15

Trp Gly His Leu Asp Ala Gln Pro Ala Glu Arg Gly Gln Glu Leu
 20 25 30

Arg Lys Glu Ala Glu Ala Phe Leu Glu Lys Tyr Gly Tyr Leu Asn Glu
 35 40 45

Gln Val Pro Lys Ala Pro Thr Ser Thr Arg Phe Ser Asp Ala Ile Arg

50	55	60
Ala Phe Gln Trp Val Ser Gln Leu Pro Val Ser Gly Val Leu Asp Arg		
65	70	75
Ala Thr Leu Arg Gln Met Thr Arg Pro Arg Cys Gly Val Thr Asp Thr		
85	90	95
Asn Ser Tyr Ala Ala Trp Ala Glu Arg Ile Ser Asp Leu Phe Ala Arg		
100	105	110
His Arg Thr Lys Met Arg Arg Lys Lys Arg Phe Ala Lys Gln Gly Asn		
115	120	125
Lys Trp Tyr Lys Gln His Leu Ser Tyr Arg Leu Val Asn Trp Pro Glu		
130	135	140
His Leu Pro Glu Pro Ala Val Arg Gly Ala Val Arg Ala Ala Phe Gln		
145	150	155
Leu Trp Ser Asn Val Ser Ala Leu Glu Phe Trp Glu Ala Pro Ala Thr		
165	170	175
Gly Pro Ala Asp Ile Arg Leu Thr Phe Phe Gln Gly Asp His Asn Asp		
180	185	190
Gly Leu Gly Asn Ala Phe Asp Gly Pro Gly Gly Ala Leu Ala His Ala		
195	200	205
Phe Leu Pro Arg Arg Gly Glu Ala His Phe Asp Gln Asp Glu Arg Trp		
210	215	220
Ser Leu Ser Arg Arg Arg Gly Arg Asn Leu Phe Val Val Leu Ala His		
225	230	235
Glu Ile Gly His Thr Leu Gly Leu Thr His Ser Pro Ala Pro Arg Ala		
245	250	255
Leu Met Ala Pro Tyr Tyr Lys Arg Leu Gly Arg Asp Ala Leu Leu Ser		
260	265	270
Trp Asp Asp Val Leu Ala Val Gln Ser Leu Tyr Gly Lys Pro Leu Gly		
275	280	285

Gly Ser Val Ala Val Gln Leu Pro Gly Lys Leu Phe Thr Asp Phe Glu
 290 295 300
 Thr Trp Asp Ser Tyr Ser Pro Gln Gly Arg Arg Pro Glu Thr Gln Gly
 305 310 315 320
 Pro Lys Tyr Cys His Ser Ser Phe Asp Ala Ile Thr Val Gly Ser His
 325 330 335
 Phe Trp Glu Val Ala Ala Asp Gly Asn Val Ser Glu Pro Arg Pro Leu
 340 345 350
 Gln Glu Arg Trp Val Gly Leu Pro Pro Asn Ile Glu Ala Ala Ala Val
 355 360 365
 Ser Leu Asn Asp Gly Asp Phe Tyr Phe Phe Lys Gly Gly Arg Cys Trp
 370 375 380
 Arg Phe Arg Gly Pro Lys Pro Val Trp Gly Leu Pro Gln Leu Cys Arg
 385 390 395 400
 Ala Gly Gly Leu Pro Arg His Pro Asp Ala Ala Leu Phe Phe Pro Pro
 405 410 415
 Leu Arg Arg Leu Ile Leu Phe Lys Gly Ala Arg Tyr Tyr Val Leu Ala
 420 425 430
 Arg Gly Gly Leu Gln Val Glu Pro Tyr Tyr Pro Arg Ser Leu Gln Asp
 435 440 445
 Trp Gly Gly Ile Pro Glu Glu Val Ser Gly Ala Leu Pro Arg Pro Asp
 450 455 460
 Gly Ser Ile Ile Phe Phe Arg Asp Asp Arg Tyr Trp Arg Leu Asp Gln
 465 470 475 480
 Ala Lys Leu Gln Ala Thr Thr Ser Gly Arg Trp Ala Thr Glu Leu Pro
 485 490 495
 Trp Met Gly Cys Trp His Ala Asn Ser Gly Ser Ala Leu Phe
 500 505 510

<210> 3239

<211> 248

<212> PRT

<213> Homo sapiens

<400> 3239

Met Pro Arg Ile Ala Gly Asn His Leu Met Leu Glu Glu Ser Arg Thr

1 5 10 15

Cys Ser Ser Pro Glu Leu Leu Asp Gly Val Trp Pro Cys Gln Pro Leu

20 25 30

His Phe Gly Leu Pro Ala Ser Glu Met His Phe Gln Thr Met Leu Lys

35 40 45

Ser Lys Leu Asn Val Leu Thr Leu Lys Lys Glu Pro Leu Pro Ala Val

50 55 60

Ile Phe His Glu Pro Glu Ala Ile Glu Leu Cys Thr Thr Thr Pro Leu

65 70 75 80

Met Lys Thr Arg Thr His Ser Gly Cys Lys Val Thr Tyr Leu Gly Lys

85 90 95

Val Ser Thr Thr Gly Met Gln Phe Leu Ser Gly Cys Thr Glu Lys Pro

100 105 110

Val Ile Glu Leu Trp Lys Lys His Thr Leu Ala Arg Glu Asp Val Phe

115 120 125

Pro Ala Asn Ala Leu Leu Glu Ile Arg Pro Phe Gln Val Trp Leu His

130 135 140

His Leu Asp His Lys Gly Glu Ala Thr Val His Met Asp Thr Phe Gln

145 150 155 160

Val Ala Arg Ile Ala Tyr Cys Thr Ala Asp His Asn Val Ser Pro Asn

165 170 175

Ile Phe Ala Trp Val Tyr Arg Glu Ile Asn Asp Asp Leu Ser Tyr Gln
 180 185 190
 Met Asp Cys His Ala Val Glu Cys Glu Ser Lys Leu Glu Ala Lys Lys
 195 200 205
 Leu Ala His Ala Met Met Glu Ala Phe Arg Lys Thr Phe His Ser Met
 210 215 220
 Lys Ser Asp Gly Arg Ile His Ser Asn Ser Ser Ser Glu Glu Val Ser
 225 230 235 240
 Gln Glu Leu Glu Ser Asp Asp Gly
 245

<210> 3240

<211> 588

<212> PRT

<213> Homo sapiens

<400> 3240

Met Asp Thr Asn Asp Asp Pro Asp Glu Asp His Leu Thr Ser Tyr Asp
 1 5 10 15

Ile Gln Leu Ser Ile Gln Glu Ser Ile Glu Ala Ser Lys Thr Ala Leu
 20 25 30

Cys Pro Glu Arg Phe Val Pro Leu Ser Ala Gln Asn Arg Lys Leu Val
 35 40 45

Glu Ala Ile Lys Gln Gly His Ile Leu Glu Leu Gln Glu Tyr Val Lys
 50 55 60

Tyr Lys Tyr Ala Met Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu
 65 70 75 80

His Glu Ala Val Val Gln Pro Ile Gln Gln Ile Leu Glu Ile Val Leu

85	90	95
Asp Ala Ser Tyr Lys Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu		
100	105	110
Thr Pro Leu Thr Leu Ala Val Lys Ala Gly Leu Val Glu Asn Val Arg		
115	120	125
Thr Leu Leu Glu Lys Gly Val Trp Pro Asn Thr Lys Asn Asp Lys Gly		
130	135	140
Glu Thr Pro Leu Leu Ile Ala Val Lys Lys Gly Ser Tyr Asp Met Val		
145	150	155
Ser Thr Leu Ile Lys His Asn Thr Ser Leu Asp Gln Pro Cys Val Lys		
165	170	175
Arg Trp Ser Ala Met His Glu Ala Ala Lys Gln Gly Arg Lys Asp Ile		
180	185	190
Val Ala Leu Leu Leu Lys His Gly Gly Asn Val His Leu Arg Asp Gly		
195	200	205
Phe Gly Val Thr Pro Leu Gly Val Ala Ala Glu Tyr Gly His Cys Asp		
210	215	220
Val Leu Glu His Leu Ile His Lys Gly Gly Asp Val Leu Ala Leu Ala		
225	230	235
Asp Asp Gly Ala Ser Val Leu Phe Glu Ala Ala Gly Gly Asn Pro		
245	250	255
Asp Cys Ile Ser Leu Leu Leu Glu Tyr Gly Ser Gly Asn Val Pro		
260	265	270
Asn Arg Ala Gly His Leu Pro Ile His Arg Ala Ala Tyr Glu Gly His		
275	280	285
Tyr Leu Ala Leu Lys Tyr Leu Ile Pro Val Thr Ser Lys Asn Ala Ile		
290	295	300
Arg Lys Ser Gly Leu Thr Pro Ile His Ser Ala Ala Asp Gly Gln Asn		
305	310	315
Asp Asp Gly Ala Ser Val Leu Phe Glu Ala Ala Gly Gly Asn Pro		
320		

Ala Gln Cys Leu Glu Leu Leu Ile Glu Asn Gly Phe Asp Val Asn Thr
 325 330 335
 Leu Leu Ala Asp His Ile Ser Gln Ser Cys Asp Asp Glu Arg Lys Thr
 340 345 350
 Ala Leu Tyr Phe Ala Val Ser Asn Asn Asp Val His Cys Thr Glu Val
 355 360 365
 Leu Leu Ala Ala Gly Ala Asp Pro Asn Leu Asp Pro Leu Asn Cys Leu
 370 375 380
 Leu Val Ala Val Arg Ala Asn Asn Tyr Glu Ile Val Arg Leu Leu Leu
 385 390 395 400
 Ser His Gly Ala Asn Val Asn Cys Tyr Phe Met His Val Asn Asp Thr
 405 410 415
 Arg Phe Pro Ser Val Ile Gln Tyr Ala Leu Asn Asp Glu Val Met Leu
 420 425 430
 Arg Leu Leu Leu Asn Asn Gly Tyr Gln Val Glu Met Cys Phe Asp Cys
 435 440 445
 Met His Gly Asp Ile Phe Gly Asn Ser Phe Val Trp Ser Glu Ile Gln
 450 455 460
 Glu Glu Val Leu Pro Gly Trp Thr Ser Cys Val Ile Lys Asp Asn Pro
 465 470 475 480
 Phe Cys Glu Phe Ile Thr Val Pro Trp Met Lys His Leu Val Gly Arg
 485 490 495
 Val Thr Arg Val Leu Ile Asp Tyr Met Asp Tyr Val Pro Leu Cys Ala
 500 505 510
 Lys Leu Lys Ser Ala Leu Glu Val Gln Arg Glu Trp Pro Glu Ile Arg
 515 520 525
 Gln Ile Leu Glu Asn Pro Cys Ser Leu Lys His Leu Cys Arg Leu Lys
 530 535 540
 Ile Arg Arg Leu Met Gly Leu Gln Lys Leu Cys Gln Pro Ala Ser Val

545	550	555	560
Glu Lys Leu Pro Leu Pro Pro Ala Ile Gln Arg Tyr Ile Leu Phe Lys			
565	570	575	
Glu Tyr Asp Leu Tyr Gly Gln Glu Leu Lys Leu Thr			
580	585		

<210> 3241

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3241

Met Gln Gly Leu Ser Val Cys Leu Ser Phe Ser Leu Arg Asn Glu Asn

1	5	10	15
---	---	----	----

Pro Asp Leu Arg Ala Val Gln Leu Arg Ala His Tyr Leu Pro Ser Pro

20	25	30
----	----	----

Ser Arg Pro Gln Pro His His Pro Thr Cys Pro Leu Pro Pro Thr Ser

35	40	45
----	----	----

Ser Gly Ala Phe Ser Arg Cys Leu Met Val Gly Gly Phe Leu Met Gly

50	55	60
----	----	----

Gln Glu Arg Arg Ala Ser Ser Cys Asp Ser Thr Val Trp Val Lys Cys

65	70	75	80
----	----	----	----

Pro Val Arg Ala Trp Cys Gly Glu Leu Ala Ser Glu Glu Pro Leu Val

85	90	95
----	----	----

Gly Lys Arg Glu Val Gly

100

<210> 3242

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3242

Met Glu Arg Gln Pro Gly Pro Val Arg Gly Lys Leu Gln Ile Phe Gln

1

5

10

15

Lys Thr Glu Lys Asp Pro Gln Ala Arg Ala Gly Ser Pro Val Gln Glu

20

25

30

Tyr His Thr Ala Leu Val Ala Gly Asp Leu Asp His Leu Lys Pro Leu

35

40

45

Met Asp Gln Phe Phe Gln Asp Ala Asn Val Val Phe Glu Ile Asn Lys

50

55

60

Asp Glu Met Glu Trp Gln Val Lys Ser Pro Ala Thr Phe Gly Leu Ser

65

70

75

80

Gly Leu Trp Thr Leu Glu Tyr Lys Arg Glu Leu Thr Thr Pro Leu Cys

85

90

95

Ile Ala Ala Ala His Gly His Thr Ala Cys Val Arg His Leu Leu Gly

100

105

110

Arg Gly Ala Asp Pro Asp Ala Ser Pro Ala Gly Pro Arg Val Pro Asp

115

120

125

Arg Ile Leu Arg Ser Pro Gly Leu Thr Ala Ala His Gly Ala Gly Ala

130

135

140

Ala Gln Pro Arg Leu Ser His Arg Val Ala Arg Arg Leu Pro Gln Gly

145

150

155

160

Ala Glu Asp Leu Cys Ile Cys Pro Arg Ser His Arg Gly Ala Phe Gln

165

170

175

Leu Leu Pro Ser Ala Leu Leu Val Arg Val Leu Glu Gly Ser Asp Ser

180

185

190

<210> 3243

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3243

Met Met Ser Ser Val Ser Thr Glu Ser Lys Leu Gln Gln Ala Val Ser

1

5

10

15

Leu Gln Gly Val Asp Pro Glu Thr Cys Met Ile Val Phe Lys Asn His

20

25

30

Trp Ala Gln Val Val Lys Ile Leu Glu Lys His Asp Pro Leu Lys Asn

35

40

45

Thr Gln Ala Lys Tyr Gly Ser Ile Pro Pro Asp Glu Ala Ser Ala Val

50

55

60

Gln Asn Tyr Val Glu His Met Leu Phe Leu Leu Ile Glu Glu Gln Ala

65

70

75

80

Lys Asp Ala Ala Met Gly Pro Ile Leu Glu Phe Val Val Ser Glu Asn

85

90

95

Ile Met Glu Lys Leu Phe Leu Trp Ser Leu Arg Arg Glu Phe Thr Asp

100

105

110

Glu Thr Lys Ile Glu Gln Leu Lys Met Tyr Glu Met Leu Val Thr Gln

115

120

125

Ser His Gln Pro Leu Leu His His Lys Pro Ile Leu Lys Pro Leu Met

130

135

140

Met Leu Leu Ser Ser Cys Ser Gly Thr Thr Pro Thr Val Glu Glu

145

150

155

160

Lys Leu Val Val Leu Leu Asn Gln Leu Cys Ser Ile Leu Ala Lys Asp
165 170 175
Pro Ser Ile Leu Glu Leu Phe Phe His Thr Ser Glu Asp Gln Gly Ala
180 185 190
Ala Asn Phe Leu Ile Phe Ser Leu Leu Ile Pro Phe Ile His Arg Glu
195 200 205
Gly Ser Val Gly Gln Gln Ala Arg Asp Ala Leu Leu Phe Ile Met Ser
210 215 220
Leu Ser Ala Glu Asn Thr Met Val Ala His His Ile Val Glu Asn Thr
225 230 235 240
Tyr Phe Cys Pro Val Leu Ala Thr Gly Leu Ser Gly Leu Tyr Ser Ser
245 250 255
Leu Pro Thr Lys Leu Glu Asp Glu Asp Asp Phe Asp Ser Phe Ile
260 265 270
Ala Glu Met Pro Ala Val Glu Thr Val Pro Ser Pro Phe Val Gly Arg
275 280 285
Asp Glu Ala Ala Phe Ala Ser Arg His Pro Val Arg Thr Gln Ser Thr
290 295 300
Pro Phe Thr Gly Pro Phe Ile Ser Val Val Leu
305 310 315

<210> 3244

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3244

Met Leu Asp Gly Leu Gln Arg Leu Arg Ser Gln Pro Lys Leu Ala Asp

1	5	10	15
Val	Thr	Leu	Leu
Val	Gly	Gly	Arg
		Glu	Leu
		Pro	Cys
		His	Arg
		Gly	Leu
20		25	
Leu	Ala	Leu	Ser
Ser	Ser	Pro	Tyr
		Phe	His
		Ala	Met
		Phe	Ala
		Gly	Asp
		Phe	
35		40	
Ala	Glu	Ser	Phe
Ser	Ala	Arg	Val
		Glu	Leu
		Arg	Asp
		Val	Glu
			Pro
50		55	
Val	Val	Gly	Gln
		Leu	Leu
		Val	Asp
		Phe	Val
		Tyr	Thr
		Gly	Arg
		Leu	Thr
		Ile	
65		70	
Thr	Gln	Gly	Asn
		Val	Glu
		Ala	Leu
		Thr	Arg
		Thr	Ala
		Ala	Arg
		Leu	His
85		90	
Phe	Pro	Ser	Val
		Gln	Lys
		Val	Cys
		Gly	Arg
		Tyr	Leu
		Gln	Gln
100		105	
Asp	Ala	Ala	Asn
		Cys	Leu
		Gly	Ile
		Cys	Glu
		Phe	Gly
		Glu	Gln
115		120	
Leu	Leu	Gly	Val
		Ala	Ala
		Lys	Ala
		Trp	Ala
		Phe	Leu
		Arg	Glu
		Asn	Phe
130		135	
Glu	Ala	Val	Ala
		Arg	Glu
		Asp	Glu
		Phe	Leu
		Gln	Leu
		Pro	Arg
		Glu	Arg
145		150	
Leu	Val	Thr	Cys
		Leu	Ala
		Gly	Asp
		Leu	Leu
		Gln	Val
		Gln	Pro
		Pro	Gln
165		170	
Gly	Arg	Leu	Glu
		Ala	Leu
		Met	Arg
		Trp	Val
		Arg	His
		Asp	Pro
		Gln	Ala
180		185	
Arg	Ala	Val	His
		Leu	Pro
		Glu	Leu
		Leu	Ser
		Leu	Val
		His	Leu
		Asp	Ala
195		200	
Val	Pro	Arg	Pro
		Cys	Val
		Gln	Gln
		Leu	Leu
		Ala	Ser
		Glu	Pro
		Leu	Ile
210		215	
Gln	Glu	Ser	Glu
		Ala	Cys
		Arg	Ala
		Ala	Leu
		Ser	Gln
		Gly	His
225		230	
235		240	

Ala Pro Leu Ala Leu Gln Gln Lys Leu Glu Glu Val Leu Val Val
 245 250 255
 Gly Gly Gln Ala Leu Glu Glu Glu Ala Gly Glu Glu Pro Thr Pro
 260 265 270
 Gly Leu Gly Asn Phe Ala Phe Tyr Asn Ser Lys Ala Lys Arg Trp Met
 275 280 285
 Ala Leu Pro Asp Phe Pro Asp Tyr His Lys
 290 295

<210> 3245

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3245

Met Cys Arg Cys Arg Arg Tyr Arg Arg Arg Gly Arg Val Trp Gly Gly
 1 5 10 15

Ala Gly Asp Ser Arg Ala Ala Gly Asn Arg Ser Gly Ser Gly Ala Ala
 20 25 30

Pro Gly Leu Arg Trp Gly Gly Val Arg His Trp Pro His Leu Val Ile
 35 40 45

Pro Ala Ala His Arg Pro Gln Phe Pro Arg Leu Leu Asn Gly Tyr Ala
 50 55 60

Gly Gly Ala Thr Gly Trp Ile Trp Ile Arg Ile Arg Gly Ile Gly Ile
 65 70 75 80

Gly Ala Ser Cys Val Leu Gly Val Ser Cys Asn Leu Glu Leu Gly Val
 85 90 95

Ala Arg Phe Val Pro Gln Phe Pro Cys Ile Val Gly Asp Gly Ala

100	105	110
-----	-----	-----

<210> 3246

<211> 676

<212> PRT

<213> Homo sapiens

<400> 3246

Met Glu Pro Arg Gly Gly Ser Ser Gln Phe Ser Ser Cys Pro Gly

1	5	10	15
---	---	----	----

Pro Ala Ser Ser Gly Asp Gln Met Gln Arg Leu Leu Gln Gly Pro Ala

20	25	30
----	----	----

Pro Arg Pro Pro Gly Glu Pro Pro Gly Ser Pro Lys Ser Pro Gly His

35	40	45
----	----	----

Ser Thr Gly Ser Gln Arg Pro Pro Asp Ser Pro Gly Ala Pro Pro Arg

50	55	60
----	----	----

Ser Pro Ser Arg Lys Lys Arg Arg Ala Val Gly Ala Lys Gly Gly Gly

65	70	75	80
----	----	----	----

His Thr Gly Ala Ser Ala Ser Ala Gln Thr Gly Ser Pro Leu Leu Pro

85	90	95
----	----	----

Ala Ala Ser Pro Glu Thr Ala Lys Leu Met Ala Lys Ala Gly Gln Glu

100	105	110
-----	-----	-----

Glu Leu Gly Pro Gly Pro Ala Gly Ala Pro Glu Pro Gly Pro Arg Ser

115	120	125
-----	-----	-----

Pro Val Gln Glu Asp Arg Pro Gly Pro Gly Leu Gly Leu Ser Thr Pro

130	135	140
-----	-----	-----

Val Pro Val Thr Glu Gln Gly Thr Asp Gln Ile Arg Thr Pro Arg Arg

145	150	155	160
-----	-----	-----	-----

Ala Lys Leu His Thr Val Ser Thr Thr Val Trp Glu Ala Leu Pro Asp
 165 170 175
 Val Ser Arg Ala Lys Ser Asp Met Ala Val Ser Thr Pro Ala Ser Glu
 180 185 190
 Pro Gln Pro Asp Arg Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro
 195 200 205
 Gln Ser Asp Arg Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro Gln
 210 215 220
 Pro Asp Thr Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro Gln Pro
 225 230 235 240
 Asp Arg Asp Met Ala Val Ser Ile Pro Ala Ser Lys Pro Gln Ser Asp
 245 250 255
 Thr Ala Val Ser Thr Pro Ala Ser Glu Pro Gln Ser Ser Val Ala Leu
 260 265 270
 Ser Thr Pro Ile Ser Lys Pro Gln Leu Asp Thr Asp Val Ala Val Ser
 275 280 285
 Thr Pro Ala Ser Lys His Gly Leu Asp Val Ala Leu Pro Thr Ala Gly
 290 295 300
 Pro Val Ala Lys Leu Glu Val Ala Ser Ser Pro Pro Val Ser Glu Ala
 305 310 315 320
 Val Pro Arg Met Thr Glu Ser Ser Gly Leu Val Ser Thr Pro Val Pro
 325 330 335
 Arg Ala Asp Ala Ala Gly Leu Ala Trp Pro Pro Thr Arg Arg Ala Gly
 340 345 350
 Pro Asp Val Val Glu Met Glu Ala Val Val Ser Glu Pro Ser Ala Gly
 355 360 365
 Ala Pro Gly Cys Cys Ser Gly Ala Pro Ala Leu Gly Leu Thr Gln Val
 370 375 380
 Pro Arg Lys Lys Lys Val Arg Phe Ser Val Ala Gly Pro Gly Pro Asn

385	390	395	400
Lys Pro Gly Ser Gly Gln Ala Ser Ala Arg Pro Ser Ala Leu Gln Thr			
405	410	415	
Ala Thr Gly Ala His Gly Gly Pro Gly Ala Trp Glu Ala Val Ala Val			
420	425	430	
Gly Pro Arg Pro His Gln Pro Arg Ile Leu Lys His Leu Pro Arg Pro			
435	440	445	
Pro Pro Ser Ala Val Thr Arg Val Gly Pro Gly Ser Ser Phe Ala Val			
450	455	460	
Thr Leu Pro Glu Ala Tyr Glu Phe Phe Cys Asp Thr Ile Glu Glu			
465	470	475	480
Asn Glu Glu Ala Glu Ala Ala Ala Gly Gln Asp Pro Ala Gly Val			
485	490	495	
Gln Trp Pro Asp Ile Cys Glu Phe Phe Pro Asp Val Gly Ala Gln			
500	505	510	
Arg Ser Arg Arg Arg Gly Ser Pro Glu Pro Leu Pro Arg Ala Asp Pro			
515	520	525	
Val Pro Ala Pro Ile Pro Gly Asp Pro Val Pro Ile Ser Ile Pro Glu			
530	535	540	
Val Tyr Glu His Phe Phe Gly Glu Asp Arg Leu Glu Gly Val Leu			
545	550	555	560
Gly Pro Ala Val Pro Leu Pro Leu Gln Ala Leu Glu Pro Pro Arg Ser			
565	570	575	
Ala Ser Glu Gly Ala Gly Pro Gly Thr Pro Leu Lys Pro Ala Val Val			
580	585	590	
Glu Arg Leu His Leu Ala Leu Arg Arg Ala Gly Glu Leu Arg Gly Pro			
595	600	605	
Val Pro Ser Ser Ala Phe Ser Gln Asn Asp Met Cys Leu Val Phe Val			
610	615	620	

Ala Phe Ala Thr Trp Ala Val Arg Thr Ser Asp Pro His Thr Pro Asp
 625 630 635 640
 Ala Trp Lys Thr Ala Leu Leu Ala Asn Val Gly Thr Ile Ser Ala Ile
 645 650 655
 Arg Tyr Phe Arg Arg Gln Val Gly Gln Gly Arg Arg Ser His Ser Pro
 660 665 670
 Ser Pro Ser Ser
 675

<210> 3247

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3247

Met Ser Ser Asn Gln Cys Pro Gly Val His Gly Ser Ser Leu Ala Tyr

1	5	10	15
---	---	----	----

Cys Ser Gly Leu His Ser Leu Gly His Cys Cys Leu Cys Arg Tyr Lys

20	25	30
----	----	----

Lys Lys Lys Lys Glu Lys Gln Lys Lys Glu Gly Thr Ala Ala Ser Gln

35	40	45
----	----	----

Asn Val Asn Gln Asn Ile Ser Leu Trp Tyr Trp Glu Arg Lys Arg Arg

50	55	60
----	----	----

Phe Pro Arg Glu Asp Glu Asp Gln Thr Asp Cys Arg Pro Ala Ile Ser

65	70	75	80
----	----	----	----

Leu His Cys Thr Trp Ile Gly His Leu Leu Tyr Ala Pro Gly Lys Lys

85	90	95
----	----	----

Ile Gln Arg Thr Met Leu Leu

100

<210> 3248

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3248

Met Ala Asp His Asn Pro Asp Ser Asp Ser Thr Pro Arg Thr Leu Leu

1

5

10

15

Arg Arg Val Leu Asp Thr Ala Asp Pro Arg Thr Pro Arg Arg Pro Arg

20

25

30

Ser Ala Arg Ala Gly Ala Arg Arg Ala Leu Leu Glu Thr Ala Ser Pro

35

40

45

Arg Lys Leu Ser Gly Gln Thr Arg Thr Ile Ala Arg Gly Arg Ser His

50

55

60

Gly Ala Arg Val Ser Thr Gln Pro Thr Asp Pro Lys Gly Pro Trp Leu

65

70

75

80

Pro Arg Gly Gly Leu Arg Ser Ser Ala Leu Glu Pro Thr Leu

85

90

95

Arg Lys Ser Gln Gly Arg Arg Thr Asp Trp Leu Leu Gly Ala Leu Pro

100

105

110

Ile Val Cys Trp Gln Ile Gly Pro Tyr Ser Gly Gln Trp Ala Leu Gly

115

120

125

Gly Thr Asp Thr Ser Asp Ala Ala Glu Glu His Pro Thr Asn Trp

130

135

140

<210> 3249

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3249

Met Lys Glu Lys Ile Leu Arg Ala Ala Arg Glu Lys Gly Arg Ala Thr

1

5

10

15

His Lys Gly Lys Pro Ile Ser Leu Thr Ala Asp Leu Ser Thr Glu Thr

20

25

30

Leu Gln Ala Arg Arg Glu Trp Gly Pro Ile Phe Asn Ile Leu Lys Glu

35

40

45

Lys Asn Phe Gln Pro Arg Ile Ser Tyr Pro Ala Lys Leu Ser Phe Ile

50

55

60

Ser Glu Gly Glu Ile Lys Ser Phe Thr Asp Lys Arg Ile Leu Arg Asp

65

70

75

80

Phe Val Thr Thr Arg Pro Ala Leu Gln Gly Leu Leu Lys Glu Ala Leu

85

90

95

Asn Met Glu Arg Lys Asn Trp

100

<210> 3250

<211> 367

<212> PRT

<213> Homo sapiens

<400> 3250

Met Arg Gln Lys Ile Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys

1	5	10	15
Thr Gly Phe Ile Ala Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys			
20	25		30
Gln Gln Phe Ser Thr Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg			
35	40		45
Pro Gly Thr Gln Met Val Cys Thr Phe Cys Pro Pro Pro Leu Pro Lys			
50	55		60
Pro Ser Ser Thr Thr Pro Thr Pro Leu Val Ser Glu Thr Gly Gly Asn			
65	70		75
Ser Pro Ser Asp Lys Val Asp Asn Glu Leu Lys Asn Leu Glu His Leu			
85	90		95
Ser Ser Phe Ser Ser Asp Glu Asp Asp Pro Gly Tyr Ser Gln Asp Ala			
100	105		110
Tyr Lys Ser Val Ser Thr Pro Leu Thr Thr Leu Asp Ala Thr Ser Asp			
115	120		125
Lys Lys Lys Lys Thr Glu Ala Leu Gln Val Ala Thr Thr Ser Pro Thr			
130	135		140
Ala Asn Thr Thr Gly Thr Ala Thr Thr Ser Ser Thr Thr Val Gly Ala			
145	150		155
Val Lys Gln Glu Pro Leu His Ser Thr Ser Tyr Ala Val Asn Ile Leu			
165	170		175
Glu Asn Ile Ser Ser Ser Glu Ser Ser Lys Pro Ile Glu Leu Asp Gly			
180	185		190
Leu Pro Ser Asp Gln Phe Ala Lys Gly Gln Asp Thr Val Ala Ile Glu			
195	200		205
Gly Phe Thr Asp Glu Glu Asp Thr Glu Ser Gly Gly Glu Gly Gln Tyr			
210	215		220
Arg Glu Arg Asp Glu Phe Val Val Lys Ile Glu Asp Ile Glu Thr Phe			
225	230		235
			240

Lys Glu Ala Leu Lys Thr Gly Lys Glu Pro Pro Ala Ile Trp Lys Val
 245 250 255
 Gln Lys Ala Leu Leu Gln Lys Phe Val Pro Val Ile Arg Asp Gly Gln
 260 265 270
 Arg Glu Phe Ala Ala Thr Asn Ser Tyr Leu Gly Tyr Phe Gly Asp Ala
 275 280 285
 Lys Ser Lys Tyr Lys Arg Ile Tyr Val Lys Phe Ile Glu Asn Ala Asn
 290 295 300
 Lys Lys Glu Tyr Val Arg Val Cys Ser Lys Lys Pro Arg Asn Lys Pro
 305 310 315 320
 Ser Gln Thr Ile Arg Thr Val Gln Ala Lys Pro Ser Ser Ser Ser Lys
 325 330 335
 Thr Ser Asp Pro Leu Ala Ser Lys Thr Thr Thr Lys Ala Pro Ser
 340 345 350
 Val Lys Pro Lys Val Lys Gln Pro Lys Val Lys Ala Glu Pro Pro
 355 360 365

<210> 3251

<211> 1367

<212> PRT

<213> Homo sapiens

<400> 3251

Met Gly Asn Ser Asp Ser Gln Tyr Thr Leu Gln Gly Ser Lys Asn His
 1 5 10 15
 Ser Asn Thr Ile Thr Gly Ala Lys Gln Ile Pro Cys Ser Leu Lys Ile
 20 25 30
 Arg Gly Ile His Ala Lys Glu Glu Lys Ser Leu His Gly Trp Gly His

35	40	45
Gly Ser Asn Gly Ala Gly Tyr Lys Ser Arg Ser Leu Ala Arg Ser Cys		
50	55	60
Leu Ser His Phe Lys Ser Asn Gln Pro Tyr Ala Ser Arg Leu Gly Gly		
65	70	75
Pro Thr Cys Lys Val Ser Arg Gly Val Ala Tyr Ser Thr His Arg Thr		
85	90	95
Asn Ala Pro Gly Lys Asp Phe Gln Gly Ile Ser Ala Ala Phe Ser Thr		
100	105	110
Glu Asn Gly Phe His Ser Val Gly His Glu Leu Ala Asp Asn His Ile		
115	120	125
Thr Ser Arg Asp Cys Asn Gly His Leu Leu Asn Cys Tyr Gly Arg Asn		
130	135	140
Glu Ser Ile Ala Ser Thr Pro Pro Gly Glu Asp Arg Lys Ser Pro Arg		
145	150	155
Val Leu Ile Lys Thr Leu Gly Lys Leu Asp Gly Cys Leu Arg Val Glu		
165	170	175
Phe His Asn Gly Gly Asn Pro Ser Lys Val Pro Ala Glu Asp Cys Ser		
180	185	190
Glu Pro Val Gln Leu Leu Arg Tyr Ser Pro Thr Leu Ala Ser Glu Thr		
195	200	205
Ser Pro Val Pro Glu Ala Arg Arg Gly Ser Ser Ala Asp Ser Leu Pro		
210	215	220
Ser His Arg Pro Ser Pro Thr Asp Ser Arg Leu Arg Ser Ser Lys Gly		
225	230	235
Ser Ser Leu Ser Ser Glu Ser Ser Trp Tyr Asp Ser Pro Trp Gly Asn		
245	250	255
Ala Gly Glu Leu Ser Glu Ala Glu Gly Ser Phe Leu Ala Pro Gly Met		
260	265	270

Pro Asp Pro Ser Leu His Ala Ser Phe Pro Pro Gly Asp Ala Lys Lys
 275 280 285
 Pro Phe Asn Gln Ser Ser Ser Leu Ser Ser Leu Arg Glu Leu Tyr Lys
 290 295 300
 Asp Ala Asn Leu Gly Ser Leu Ser Pro Ser Gly Ile Arg Leu Ser Asp
 305 310 315 320
 Glu Tyr Met Gly Thr His Ala Ser Leu Ser Asn His Val Ser Phe Ala
 325 330 335
 Ser Asp Ile Asp Val Pro Ser Arg Val Ala His Gly Asp Pro Ile Gln
 340 345 350
 Tyr Ser Ser Phe Thr Leu Pro Cys Arg Lys Pro Lys Ala Phe Val Glu
 355 360 365
 Asp Thr Ala Lys Lys Asp Ser Leu Lys Ala Arg Met Arg Arg Ile Ser
 370 375 380
 Asp Trp Thr Gly Ser Leu Ser Arg Lys Lys Arg Lys Leu Gln Glu Pro
 385 390 395 400
 Arg Ser Lys Glu Gly Ser Asp Tyr Phe Asp Ser Arg Ser Asp Gly Leu
 405 410 415
 Asn Thr Asp Val Gln Gly Ser Ser Gln Ala Ser Ala Phe Leu Trp Ser
 420 425 430
 Gly Gly Ser Thr Gln Ile Leu Ser Gln Arg Ser Glu Ser Thr His Ala
 435 440 445
 Ile Gly Ser Asp Pro Leu Arg Gln Asn Ile Tyr Glu Asn Phe Met Arg
 450 455 460
 Glu Leu Glu Met Ser Arg Thr Asn Thr Glu Asn Ile Glu Thr Ser Thr
 465 470 475 480
 Glu Thr Ala Glu Ser Ser Ser Glu Ser Leu Ser Ser Leu Glu Gln Leu
 485 490 495
 Asp Leu Leu Phe Glu Lys Glu Gln Gly Val Val Arg Lys Ala Gly Trp

500	505	510
Leu Phe Phe Lys Pro Leu Val Thr Val Gln Lys Glu Arg Lys Leu Glu		
515	520	525
Leu Val Ala Arg Arg Lys Trp Lys Gln Tyr Trp Val Thr Leu Lys Gly		
530	535	540
Cys Thr Leu Leu Phe Tyr Glu Thr Tyr Gly Lys Asn Ser Met Asp Gln		
545	550	555
Ser Ser Ala Pro Arg Cys Ala Leu Phe Ala Glu Asp Ser Ile Val Gln		
565	570	575
Ser Val Pro Glu His Pro Lys Lys Glu Asn Val Phe Cys Leu Ser Asn		
580	585	590
Ser Phe Gly Asp Val Tyr Leu Phe Gln Ala Thr Ser Gln Thr Asp Leu		
595	600	605
Glu Asn Trp Val Thr Ala Val His Ser Ala Cys Ala Ser Leu Phe Ala		
610	615	620
Lys Lys His Gly Lys Glu Asp Thr Leu Arg Leu Leu Lys Asn Gln Thr		
625	630	635
Lys Asn Leu Leu Gln Lys Ile Asp Met Asp Ser Lys Met Lys Met		
645	650	655
Ala Glu Leu Gln Leu Ser Val Val Ser Asp Pro Lys Asn Arg Lys Ala		
660	665	670
Ile Glu Asn Gln Ile Gln Gln Trp Glu Gln Asn Leu Glu Lys Phe His		
675	680	685
Met Asp Leu Phe Arg Met Arg Cys Tyr Leu Ala Ser Leu Gln Gly Gly		
690	695	700
Glu Leu Pro Asn Pro Lys Ser Leu Leu Ala Ala Ala Ser Arg Pro Ser		
705	710	715
Lys Leu Ala Leu Gly Arg Leu Gly Ile Leu Ser Val Ser Ser Phe His		
725	730	735

Ala Leu Val Cys Ser Arg Asp Asp Ser Ala Leu Arg Lys Arg Thr Leu
 740 745 750
 Ser Leu Thr Gln Arg Gly Arg Asn Lys Lys Gly Ile Phe Ser Ser Leu
 755 760 765
 Lys Gly Leu Asp Thr Leu Ala Arg Lys Gly Lys Glu Lys Arg Pro Ser
 770 775 780
 Ile Thr Gln Val Asp Glu Leu Leu His Ile Tyr Gly Ser Thr Val Asp
 785 790 795 800
 Gly Val Pro Arg Asp Asn Ala Trp Glu Ile Gln Thr Tyr Val His Phe
 805 810 815
 Gln Asp Asn His Gly Val Thr Val Gly Ile Lys Pro Glu His Arg Val
 820 825 830
 Glu Asp Ile Leu Thr Leu Ala Cys Lys Met Arg Gln Leu Glu Pro Ser
 835 840 845
 His Tyr Gly Leu Gln Leu Arg Lys Leu Val Asp Asp Asn Val Glu Tyr
 850 855 860
 Cys Ile Pro Ala Pro Tyr Glu Tyr Met Gln Gln Gln Val Tyr Asp Glu
 865 870 875 880
 Ile Glu Val Phe Pro Leu Asn Val Tyr Asp Val Gln Leu Thr Lys Thr
 885 890 895
 Gly Ser Val Cys Asp Phe Gly Phe Ala Val Thr Ala Gln Val Asp Glu
 900 905 910
 Arg Gln His Leu Ser Arg Ile Phe Ile Ser Asp Val Leu Pro Asp Gly
 915 920 925
 Leu Ala Tyr Gly Glu Gly Leu Arg Lys Gly Asn Glu Ile Met Thr Leu
 930 935 940
 Asn Gly Glu Ala Val Ser Asp Leu Asp Leu Lys Gln Met Glu Ala Leu
 945 950 955 960
 Phe Ser Glu Lys Ser Val Gly Leu Thr Leu Ile Ala Arg Pro Pro Asp

965	970	975
Thr Lys Ala Thr Leu Cys Thr Ser Trp Ser Asp Ser Asp Leu Phe Ser		
980	985	990
Arg Asp Gln Lys Ser Leu Leu Pro Pro Pro Asn Gln Ser Gln Leu Leu		
995	1000	1005
Glu Glu Phe Leu Asp Asn Phe Lys Lys Asn Thr Ala Asn Asp Phe Ser		
1010	1015	1020
Asn Val Pro Asp Ile Thr Thr Gly Leu Lys Arg Ser Gln Thr Asp Gly		
1025	1030	1035
1040		
Thr Leu Asp Gln Val Ser His Arg Glu Lys Met Glu Gln Thr Phe Arg		
1045	1050	1055
Ser Ala Glu Gln Ile Thr Ala Leu Cys Arg Ser Phe Asn Asp Ser Gln		
1060	1065	1070
Ala Asn Gly Met Glu Gly Pro Arg Glu Asn Gln Asp Pro Pro Pro Arg		
1075	1080	1085
Pro Leu Ala Arg His Leu Ser Asp Ala Asp Arg Leu Arg Lys Val Ile		
1090	1095	1100
Gln Glu Leu Val Asp Thr Glu Lys Ser Tyr Val Lys Asp Leu Ser Cys		
1105	1110	1115
1120		
Leu Phe Glu Leu Tyr Leu Glu Pro Leu Gln Asn Glu Thr Phe Leu Thr		
1125	1130	1135
Gln Asp Glu Met Glu Ser Leu Phe Gly Ser Leu Pro Glu Met Leu Glu		
1140	1145	1150
Phe Gln Lys Val Phe Leu Glu Thr Leu Glu Asp Gly Ile Ser Ala Ser		
1155	1160	1165
Ser Asp Phe Asn Thr Leu Glu Thr Pro Ser Gln Phe Arg Lys Leu Leu		
1170	1175	1180
Phe Ser Leu Gly Gly Ser Phe Leu Tyr Tyr Ala Asp His Phe Lys Leu		
1185	1190	1195
1200		

Tyr Ser Gly Phe Cys Ala Asn His Ile Lys Val Gln Lys Val Leu Glu
1205 1210 1215
Arg Ala Lys Thr Asp Lys Ala Phe Lys Ala Phe Leu Asp Ala Arg Asn
1220 1225 1230
Pro Thr Lys Gln His Ser Ser Thr Leu Glu Ser Tyr Leu Ile Lys Pro
1235 1240 1245
Val Gln Arg Val Leu Lys Tyr Pro Leu Leu Lys Glu Leu Val Ser
1250 1255 1260
Leu Thr Asp Gln Glu Ser Glu Glu His Tyr His Leu Thr Glu Ala Leu
1265 1270 1275 1280
Lys Ala Met Glu Lys Val Ala Ser His Ile Asn Glu Met Gln Lys Ile
1285 1290 1295
Tyr Glu Asp Tyr Gly Thr Val Phe Asp Arg Leu Val Ala Glu Gln Ser
1300 1305 1310
Gly Thr Glu Lys Glu Val Thr Glu Leu Ser Met Gly Glu Leu Leu Met
1315 1320 1325
His Ser Thr Val Ser Trp Leu Asn Pro Phe Leu Ser Leu Gly Lys Ala
1330 1335 1340
Arg Lys Asp Leu Glu Leu Thr Val Phe Val Phe Lys Arg Ala Val Ile
1345 1350 1355 1360
Leu Val Tyr Lys Glu Asn Cys
1365

<210> 3252

<211> 238

<212> PRT

<213> Homo sapiens

<400> 3252

Met Ile Ser Ser Tyr Leu Val Cys Leu Phe Thr Asp Thr Ile Arg Tyr
 1 5 10 15
 Leu Ser Leu His Asp Asn Lys Tyr Ile Arg Tyr Phe Pro Gly His Ser
 20 25 30
 Lys Arg Val Val Ala Leu Ser Met Ser Pro Val Asp Asp Thr Phe Ile
 35 40 45
 Ser Gly Ser Leu Asp Lys Thr Ile Arg Leu Trp Asp Leu Arg Ser Pro
 50 55 60
 Asn Cys Gln Gly Leu Met His Leu Gln Gly Lys Pro Val Cys Ser Phe
 65 70 75 80
 Asp Pro Glu Gly Leu Ile Phe Ala Ala Gly Val Asn Ser Glu Met Val
 85 90 95
 Lys Leu Tyr Asp Leu Arg Ser Phe Asp Lys Gly Pro Phe Ala Thr Phe
 100 105 110
 Lys Met Gln Tyr Asp Arg Thr Cys Glu Trp Thr Gly Leu Lys Phe Ser
 115 120 125
 Asn Asp Gly Lys Leu Ile Leu Ile Ser Thr Asn Gly Ser Phe Ile Arg
 130 135 140
 Leu Ile Asp Ala Phe Lys Gly Val Val Met His Thr Phe Gly Gly Tyr
 145 150 155 160
 Ala Asn Ser Lys Ala Val Thr Leu Glu Ala Ser Phe Thr Pro Asp Ser
 165 170 175
 Gln Phe Ile Met Ile Gly Ser Glu Asp Gly Lys Ile His Val Trp Asn
 180 185 190
 Gly Glu Ser Gly Ile Lys Val Ala Val Leu Asp Gly Lys His Thr Gly
 195 200 205
 Pro Ile Thr Cys Leu Gln Phe Asn Pro Lys Phe Met Thr Phe Ala Ser
 210 215 220

Ala Cys Ser Asn Met Ala Phe Trp Leu Pro Thr Ile Asp Asp

225 230 235

<210> 3253

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3253

Met Gln Glu Ala Thr Leu Ser His Pro Arg Tyr Cys Pro His Thr Gln

1 5 10 15

Ala Ala Ala Leu Asn Ile Pro His Asn Lys Ala Lys Gly Ser Asp Lys

20 25 30

Ser Tyr Tyr Ser Gln Pro Ser His Leu Glu Thr Arg Gly Glu Thr Asn

35 40 45

Leu Pro Leu Asp Val Leu Arg Glu Arg Gln Asp Pro Gln Arg Asn Leu

50 55 60

Ser Glu Leu Ser Thr Cys Leu Ile Gln Gln Asp Arg Asp Gly Arg Arg

65 70 75 80

Leu Ala Phe Ser Phe Ala Trp Val Ser Thr Ile Leu Gln Gly Lys Leu

85 90 95

Cys Gly Gln Leu Gly Asn Thr Thr Ile Asn Trp Arg Gly Met Asn Asn

100 105 110

Arg Val Ser Gly Ala Val Cys

115

<210> 3254

<211> 881

<212> PRT

<213> Homo sapiens

<400> 3254

Met Asn Tyr Pro Gly Arg Gly Ser Pro Arg Ser Pro Glu His Asn Gly
 1 5 10 15
 Arg Gly Gly Gly Gly Ala Trp Glu Leu Gly Ser Asp Ala Arg Pro
 20 25 30
 Ala Phe Gly Gly Gly Val Cys Cys Phe Glu His Leu Pro Gly Gly Asp
 35 40 45
 Pro Asp Asp Gly Asp Val Pro Leu Ala Leu Leu Arg Gly Glu Pro Gly
 50 55 60
 Leu His Leu Ala Pro Gly Thr Asp Asp His Asn His His Leu Ala Leu
 65 70 75 80
 Asp Pro Cys Leu Ser Asp Glu Asn Tyr Asp Phe Ser Ser Ala Glu Ser
 85 90 95
 Gly Ser Ser Leu Arg Tyr Tyr Ser Glu Gly Glu Ser Gly Gly Gly
 100 105 110
 Gly Gly Ser Ser Leu Ser Leu His Pro Pro Gln Gln Pro Pro Leu Val
 115 120 125
 Pro Thr Asn Ser Gly Gly Gly Ala Thr Gly Gly Ser Pro Gly Glu
 130 135 140
 Arg Lys Arg Thr Arg Leu Gly Gly Pro Ala Ala Arg His Arg Tyr Glu
 145 150 155 160
 Val Val Thr Glu Leu Gly Pro Glu Glu Val Arg Trp Phe Tyr Lys Glu
 165 170 175
 Asp Lys Lys Thr Trp Lys Pro Phe Ile Gly Tyr Asp Ser Leu Arg Ile
 180 185 190

Glu Leu Ala Phe Arg Thr Leu Leu Gln Thr Thr Gly Ala Arg Pro Gln
 195 200 205
 Gly Gly Asp Arg Asp Gly Asp His Val Cys Ser Pro Thr Gly Pro Ala
 210 215 220
 Ser Ser Ser Gly Glu Asp Asp Asp Glu Asp Arg Ala Cys Gly Phe Cys
 225 230 235 240
 Gln Ser Thr Thr Gly His Glu Pro Glu Met Val Glu Leu Val Asn Ile
 245 250 255
 Glu Pro Val Cys Val Arg Gly Gly Leu Tyr Glu Val Asp Val Thr Gln
 260 265 270
 Gly Glu Cys Tyr Pro Val Tyr Trp Asn Gln Ala Asp Lys Ile Pro Val
 275 280 285
 Met Arg Gly Gln Trp Phe Ile Asp Gly Thr Trp Gln Pro Leu Glu Glu
 290 295 300
 Glu Glu Ser Asn Leu Ile Glu Gln Glu His Leu Asn Cys Phe Arg Gly
 305 310 315 320
 Gln Gln Met Gln Glu Asn Phe Asp Ile Glu Val Ser Lys Ser Ile Asp
 325 330 335
 Gly Lys Asp Gly Ser Gly Ile Asn Tyr Ser Ala Val His Ser Phe Lys
 340 345 350
 Leu Ser Arg Asn His Val Asp Trp His Ser Val Asp Glu Val Tyr Leu
 355 360 365
 Tyr Ser Asp Ala Thr Thr Ser Lys Ile Ala Arg Thr Val Thr Gln Lys
 370 375 380
 Leu Gly Phe Ser Lys Ala Ser Ser Ser Gly Thr Arg Leu His Arg Gly
 385 390 395 400
 Tyr Val Glu Glu Ala Thr Leu Glu Asp Lys Pro Ser Gln Thr Thr His
 405 410 415
 Ile Val Phe Val Val His Gly Ile Gly Gln Lys Met Asp Gln Gly Arg

420	425	430
Ile Ile Lys Asn Thr Ala Met Met Arg Glu Ala Ala Arg Lys Ile Glu		
435	440	445
Glu Arg His Phe Ser Asn His Ala Thr His Val Glu Phe Leu Pro Val		
450	455	460
Glu Trp Arg Ser Lys Leu Thr Leu Asp Gly Asp Thr Val Asp Ser Ile		
465	470	475
Thr Pro Asp Lys Val Arg Gly Leu Arg Asp Met Leu Asn Ser Ser Ala		
485	490	495
Met Asp Ile Met Tyr Tyr Thr Ser Pro Leu Tyr Arg Asp Glu Leu Val		
500	505	510
Lys Gly Leu Gln Gln Glu Leu Asn Arg Leu Tyr Ser Leu Phe Cys Ser		
515	520	525
Arg Asn Pro Asp Phe Glu Glu Lys Gly Gly Lys Val Ser Ile Val Ser		
530	535	540
His Ser Leu Gly Cys Val Ile Thr Tyr Asp Ile Met Thr Gly Trp Asn		
545	550	555
Pro Val Arg Leu Tyr Glu Gln Leu Leu Gln Lys Glu Glu Glu Leu Pro		
565	570	575
Asp Glu Arg Trp Met Ser Tyr Glu Glu Arg His Leu Leu Asp Glu Leu		
580	585	590
Tyr Ile Thr Lys Arg Arg Leu Lys Glu Ile Glu Glu Arg Leu His Gly		
595	600	605
Leu Lys Ala Ser Ser Met Thr Gln Thr Pro Ala Leu Lys Phe Lys Val		
610	615	620
Glu Asn Phe Phe Cys Met Gly Ser Pro Leu Ala Val Phe Leu Ala Leu		
625	630	635
Arg Gly Ile Arg Pro Gly Asn Thr Gly Ser Gln Asp His Ile Leu Pro		
645	650	655

Arg Glu Ile Cys Asn Arg Leu Leu Asn Ile Phe His Pro Thr Asp Pro
 660 665 670
 Val Ala Tyr Arg Leu Glu Pro Leu Ile Leu Lys His Tyr Ser Asn Ile
 675 680 685
 Ser Pro Val Gln Ile His Trp Tyr Asn Thr Ser Asn Pro Leu Pro Tyr
 690 695 700
 Glu His Met Lys Pro Ser Phe Leu Asn Pro Ala Lys Glu Pro Thr Ser
 705 710 715 720
 Val Ser Glu Asn Glu Gly Ile Ser Thr Ile Pro Ser Pro Val Thr Ser
 725 730 735
 Pro Val Leu Ser Arg Arg His Tyr Gly Glu Ser Ile Thr Asn Ile Gly
 740 745 750
 Lys Ala Ser Ile Leu Gly Ala Ala Ser Ile Gly Lys Gly Leu Gly Gly
 755 760 765
 Met Leu Phe Ser Arg Phe Gly Arg Ser Ser Thr Thr Gln Ser Ser Glu
 770 775 780
 Thr Ser Lys Asp Ser Met Glu Asp Glu Lys Lys Pro Val Ala Ser Pro
 785 790 795 800
 Ser Ala Thr Thr Val Gly Thr Gln Thr Leu Pro His Ser Ser Ser Gly
 805 810 815
 Phe Leu Asp Ser Ala Leu Glu Leu Asp His Arg Ile Asp Phe Glu Leu
 820 825 830
 Arg Glu Gly Leu Val Glu Ser Arg Tyr Trp Ser Ala Val Thr Ser His
 835 840 845
 Thr Ala Tyr Trp Ser Ser Leu Asp Val Ala Leu Phe Leu Leu Thr Phe
 850 855 860
 Met Tyr Lys His Glu His Asp Asp Asp Ala Lys Pro Asn Leu Asp Pro
 865 870 875 880
 Ile

<210> 3255

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3255

Met Cys Ala Trp Met Ile Asp Ser Phe Gly Asn Glu Glu Gln Arg His

1 5 10 15

Lys Phe Cys Pro Pro Leu Cys Thr Met Glu Lys Phe Ala Ser Tyr Cys

20 25 30

Leu Thr Glu Pro Gly Ser Gly Ser Asp Ala Ala Ser Leu Leu Thr Ser

35 40 45

Ala Lys Lys Gln Gly Asp His Tyr Ile Leu Asn Gly Ser Lys Ala Phe

50 55 60

Ile Ser Gly Ala Gly Glu Ser Asp Ile Tyr Val Val Met Cys Arg Thr

65 70 75 80

Gly Gly Pro Gly Pro Lys Gly Ile Ser Cys Ile Val Val Glu Lys Gly

85 90 95

Thr Pro Gly Leu Ser Phe Gly Lys Lys Glu Lys Lys Val Ser Gly Cys

100 105 110

Trp Thr Gly Asn Asn Ser Gly Tyr Glu Thr Leu Pro Pro Ala Ser Pro

115 120 125

Thr Pro Ala Leu Phe Gln Lys Thr Gly Leu His Thr Cys

130 135 140

<210> 3256

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3256

Met Ala Ala Val Ala Ala Thr Ala Ala Ala Lys Gly Asn Gly Gly Gly

1 5 10 15

Gly Gly Arg Ala Gly Ala Gly Asp Ala Ser Gly Thr Arg Lys Lys Lys

20 25 30

Gly Pro Gly Pro Leu Ala Thr Ala Tyr Leu Val Ile Tyr Asn Val Val

35 40 45

Met Thr Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr

50 55 60

Leu Ala Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro

65 70 75 80

Leu Lys Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala

85 90 95

Ile Gly Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val Met

100 105 110

Ser Arg Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val

115 120 125

Gln Ser Glu Asp Ser Val Leu Leu Phe Val Ile Ala Trp Thr Ile Thr

130 135 140

Glu Ile Ile Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu

145 150 155 160

Pro Tyr Leu Ile Lys Trp Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr

165 170 175

Pro Met Gly Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro

180	185	190
Phe Val Arg Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Lys Tyr		
195	200	205
Asn Phe Ser Phe Asp Tyr Tyr Ala Phe Leu Ile Leu Ile Met Ile Ser		
210	215	220
Tyr Ile Pro Ile Phe Pro Gln Leu Tyr Phe His Met Ile His Gln Arg		
225	230	235
Arg Lys Ile Leu Ser His Thr Glu Glu His Lys Lys Phe Glu		
245	250	

<210> 3257

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3257

Met Leu Trp Ser Val Pro Gly Asp Arg Ala Ala Pro Gly His Pro Pro			
1	5	10	15
Phe Arg Ser Glu Ala Ser His Pro Thr Gln Gly Pro Ser Thr Thr Ser			
20	25	30	
Pro Phe Ser Pro Phe Leu Gly Ala Asp Pro Gly Gly Ser Ile Tyr Arg			
35	40	45	
Gly Val Pro Gly Ser Leu Thr Ala Gly Thr Thr Glu Ala Arg Lys Ser			
50	55	60	
Cys Leu Ala Pro Ala Gln Gly Thr Gln Gly Arg Leu Gly Ala Pro Ala			
65	70	75	80
Gly Ser His Ser Pro Arg Arg Gln Gly Leu Val Tyr Pro Cys Ala Met			
85	90	95	

Ser Val Ile Gly Leu Cys Ala Gly Ser Val Met Arg Ser Leu Pro Gly
 100 105 110
 Leu Pro Arg Pro Arg Arg
 115

<210> 3258

<211> 804

<212> PRT

<213> Homo sapiens

<400> 3258

Met Arg Pro Val Ala Leu Leu Leu Pro Ser Leu Leu Ala Leu Leu
 1 5 10 15
 Ala His Gly Leu Ser Leu Glu Ala Pro Thr Val Gly Lys Gly Gln Ala
 20 25 30
 Pro Gly Ile Glu Glu Thr Asp Gly Glu Leu Thr Ala Ala Pro Thr Pro
 35 40 45
 Glu Gln Pro Glu Arg Gly Val His Phe Val Thr Thr Ala Pro Thr Leu
 50 55 60
 Lys Leu Leu Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly
 65 70 75 80
 Leu Glu Lys Gly Asp Glu Glu Leu Arg Pro Ala Leu Pro Phe Gln Pro
 85 90 95
 Asp Pro Pro Ala Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Ala Asn
 100 105 110
 Gln Asp Ser Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Met Ala Ala
 115 120 125
 Val Pro Thr Gln Pro Gln Ser Lys Glu Gly Pro Trp Ser Pro Glu Ser

130	135	140
Glu Ser Pro Met Leu Arg Ile Thr Ala Pro Leu Pro Pro Gly Pro Ser		
145	150	155
Met Ala Val Pro Thr Leu Gly Pro Gly Glu Ile Ala Ser Thr Thr Pro		
165	170	175
Pro Ser Arg Ala Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Gly		
180	185	190
Arg Pro Trp Val Ala Glu Val Val Ser Gln Gly Ala Gly Ile Gly Ile		
195	200	205
Gln Gly Thr Ile Thr Ser Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr		
210	215	220
Thr Thr Thr Thr Ile Ile Thr Thr Thr Ile Thr Thr Val Gln Thr		
225	230	235
Pro Gly Pro Cys Ser Trp Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp		
245	250	255
Ser Pro Thr Asp Leu Ser Ser Pro Thr Asp Val Gly Leu Asp Cys Phe		
260	265	270
Phe Tyr Ile Ser Val Tyr Pro Gly Tyr Gly Val Glu Ile Lys Val Gln		
275	280	285
Asn Ile Ser Leu Arg Glu Gly Glu Thr Val Thr Val Glu Gly Leu Gly		
290	295	300
Gly Pro Asp Pro Leu Pro Leu Ala Asn Gln Ser Phe Leu Leu Arg Gly		
305	310	315
Gln Val Ile Arg Ser Pro Thr His Gln Ala Ala Leu Arg Phe Gln Ser		
325	330	335
Leu Pro Pro Pro Ala Gly Pro Gly Thr Phe His Phe His Tyr Gln Ala		
340	345	350
Tyr Leu Leu Ser Cys His Phe Pro Arg Arg Pro Ala Tyr Gly Asp Val		
355	360	365

Thr Val Thr Ser Leu His Pro Gly Gly Ser Ala Arg Phe His Cys Ala
 370 375 380
 Thr Gly Tyr Gln Leu Lys Gly Ala Arg His Leu Thr Cys Leu Asn Ala
 385 390 395 400
 Thr Gln Pro Phe Trp Asp Ser Lys Glu Pro Val Cys Ile Ala Ala Cys
 405 410 415
 Gly Gly Val Ile Arg Asn Ala Thr Thr Gly Arg Ile Val Ser Pro Gly
 420 425 430
 Phe Pro Gly Asn Tyr Ser Asn Asn Leu Thr Cys His Trp Leu Leu Glu
 435 440 445
 Ala Pro Glu Gly Gln Arg Leu His Leu His Phe Glu Lys Val Ser Leu
 450 455 460
 Ala Glu Asp Asp Asp Arg Leu Ile Ile Arg Asn Gly Asp Asn Val Glu
 465 470 475 480
 Ala Pro Pro Val Tyr Asp Ser Tyr Glu Val Glu Tyr Leu Pro Ile Glu
 485 490 495
 Gly Leu Leu Ser Ser Gly Lys His Phe Phe Val Glu Leu Ser Thr Asp
 500 505 510
 Ser Ser Gly Ala Ala Ala Gly Met Ala Leu Arg Tyr Glu Ala Phe Gln
 515 520 525
 Gln Gly His Cys Tyr Glu Pro Phe Val Lys Tyr Gly Asn Phe Ser Ser
 530 535 540
 Ser Thr Pro Thr Tyr Pro Val Gly Thr Thr Val Glu Phe Ser Cys Asp
 545 550 555 560
 Pro Gly Tyr Thr Leu Glu Gln Gly Ser Ile Ile Ile Glu Cys Val Asp
 565 570 575
 Pro His Asp Pro Gln Trp Asn Glu Thr Glu Pro Ala Cys Arg Ala Val
 580 585 590
 Cys Ser Gly Glu Ile Thr Asp Ser Ala Gly Val Val Leu Ser Pro Asn

595	600	605
Trp Pro Glu Pro Tyr Gly Arg Gly Gln Asp Cys Ile Trp Gly Val His		
610	615	620
Val Glu Glu Asp Lys Arg Ile Met Leu Asp Ile Arg Val Leu Arg Ile		
625	630	635
Gly Pro Gly Asp Val Leu Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala		
645	650	655
Arg Val Leu Gly Gln Tyr Ser Gly Pro Arg Ser His Phe Lys Leu Phe		
660	665	670
Thr Ser Met Ala Asp Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr		
675	680	685
Ser Val Leu Gly Tyr Gln Gln Gly Phe Val Ile His Phe Phe Glu Val		
690	695	700
Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp		
705	710	715
Lys Ser Pro Ser Gln Pro Glu Leu Val His Gly Thr Val Val Thr Tyr		
725	730	735
Gln Cys Tyr Pro Gly Tyr Gln Val Val Gly Ser Ser Val Leu Met Cys		
740	745	750
Gln Trp Asp Leu Thr Trp Ser Glu Asp Leu Pro Ser Cys Gln Arg Val		
755	760	765
Thr Ser Cys His Asp Pro Gly Asp Val Glu His Ser Arg Arg Pro Tyr		
770	775	780
Pro Ala Pro Ser Phe Pro Trp Gly Pro Pro Cys Asn Ile Ser Val Thr		
785	790	795
Arg Val Leu Cys		

<210> 3259

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3259

Met Ala Glu Ala Gln Ser Gly Thr Gly Gln Leu Gln Glu Gln Lys Lys

1 5 10 15

Gly Leu Leu Ile Ala Val Ser Val Ser Val Asp Lys Ile Ile Ser His

20 25 30

Phe Gly Ala Ala Arg Asn Leu Val Gln Lys Ala Gln Leu Gly Asp Ser

35 40 45

Arg Leu Ser Pro Asp Val Gly His Leu Val Leu Thr Thr Leu Cys Pro

50 55 60

Ala Leu His Ala Leu Val Ala Asp Gly Leu Lys Pro Phe Arg Lys Asp

65 70 75 80

Leu Ile Thr Gly Gln Arg Arg Ser Ser Pro Trp Ser Val Val Glu Ala

85 90 95

Ser Val Lys Pro Gly Ser Ser Thr Arg Ser Leu Gly Thr Leu Tyr Ser

100 105 110

Gln Val Ser Arg Leu Ala Pro Leu Ser Ser Arg Ser Arg Phe His

115 120 125

Ala Phe Ile Leu Gly Leu Leu Asn Thr Lys Gln Leu Glu Leu Trp Phe

130 135 140

Ser Ser Leu Gln Glu Asp Ala Gly Ser Trp Trp Glu Gln Leu Thr Gln

145 150 155 160

Ala Ser Arg Val Tyr Ala Ser Gly Gly Thr Glu Gly Phe Pro Leu Ser

165 170 175

Arg Trp Ala Pro Gly Arg His Gly Thr Ala Ala Glu Glu Gly Ala Gln

180	185	190
Glu Arg Pro Leu Pro Thr Asp Glu Met Ala Pro Gly Arg Gly Leu Trp		
195	200	205
Leu Gly Arg Leu Phe Gly Val Pro Gly Gly Pro Ala Glu Asn Glu Asn		
210	215	220
Gly Ala Leu Lys Ser Arg Arg Pro Ser Ser Trp Leu Pro Pro Thr Val		
225	230	235
Ser Val Leu Ala Leu Val Lys Arg Gly Ala Pro Pro Glu Met Pro Ser		
245	250	255
Pro Gln Glu Leu Glu Ala Ser Ala Pro Arg Met Val Gln Thr His Arg		
260	265	270
Ala Val Arg Ala Leu Cys Asp His Thr Ala Ala Arg Pro Asp Gln Leu		
275	280	285
Ser Phe Arg Arg Gly Glu Val Leu Arg Val Ile Thr Thr Val Asp Glu		
290	295	300
Asp Trp Leu Arg Cys Gly Arg Asp Gly Met Glu Gly Leu Val Pro Val		
305	310	315
Gly Tyr Thr Ser Leu Val Leu		
	325	

<210> 3260

<211> 1076

<212> PRT

<213> Homo sapiens

<400> 3260

Met Gly Ile Leu Ser Ile Thr Asp Gln Pro Pro Leu Val Gln Ala Ile

1

5

10

15

Phe Ser Arg Asp Val Glu Glu Val Arg Ser Leu Leu Ser Gln Lys Glu
 20 25 30
 Asn Ile Asn Val Leu Asp Gln Glu Arg Arg Thr Pro Leu His Ala Ala
 35 40 45
 Ala Tyr Val Gly Asp Val Pro Ile Leu Gln Leu Leu Leu Met Ser Gly
 50 55 60
 Ala Asn Val Asn Ala Lys Asp Thr Leu Trp Leu Thr Pro Leu His Arg
 65 70 75 80
 Ala Ala Ala Ser Arg Asn Glu Lys Val Leu Gly Leu Leu Leu Ala His
 85 90 95
 Ser Ala Asp Val Asn Ala Arg Asp Lys Leu Trp Gln Thr Pro Leu His
 100 105 110
 Val Ala Ala Ala Asn Arg Ala Thr Lys Cys Ala Glu Ala Leu Ala Pro
 115 120 125
 Leu Leu Ser Ser Leu Asn Val Ala Asp Arg Ser Gly Arg Ser Ala Leu
 130 135 140
 His His Ala Val His Ser Gly His Leu Glu Thr Val Asn Leu Leu Leu
 145 150 155 160
 Asn Lys Gly Ala Ser Leu Asn Val Cys Asp Lys Lys Glu Arg Gln Pro
 165 170 175
 Leu His Trp Ala Ala Phe Leu Gly His Leu Glu Val Leu Lys Leu Leu
 180 185 190
 Val Ala Arg Gly Ala Asp Leu Gly Cys Lys Asp Arg Lys Gly Tyr Gly
 195 200 205
 Leu Leu His Thr Ala Ala Ser Gly Gln Ile Glu Val Val Lys Tyr
 210 215 220
 Leu Leu Arg Met Gly Ala Glu Ile Asp Glu Pro Asn Ala Phe Gly Asn
 225 230 235 240
 Thr Ala Leu His Ile Ala Cys Tyr Leu Gly Gln Asp Ala Val Ala Ile

245	250	255
Glu Leu Val Asn Ala Gly Ala Asn Val Asn Gln Pro Asn Asp Lys Gly		
260	265	270
Phe Thr Pro Leu His Val Ala Ala Val Ser Thr Asn Gly Ala Leu Cys		
275	280	285
Leu Glu Leu Leu Val Asn Asn Gly Ala Asp Val Asn Tyr Gln Ser Lys		
290	295	300
Glu Gly Lys Ser Pro Leu His Met Ala Ala Ile His Gly Arg Phe Thr		
305	310	315
Arg Ser Gln Ile Leu Ile Gln Asn Gly Ser Glu Ile Asp Cys Ala Asp		
325	330	335
Lys Phe Gly Asn Thr Pro Leu His Val Ala Ala Arg Tyr Gly His Glu		
340	345	350
Leu Leu Ile Ser Thr Leu Met Thr Asn Gly Ala Asp Thr Ala Arg Arg		
355	360	365
Gly Ile His Asp Met Phe Pro Leu His Leu Ala Val Leu Phe Gly Phe		
370	375	380
Ser Asp Cys Cys Arg Lys Leu Leu Ser Ser Gly Gln Leu Tyr Ser Ile		
385	390	395
Val Ser Ser Leu Ser Asn Glu His Val Leu Ser Ala Gly Phe Asp Ile		
405	410	415
Asn Thr Pro Asp Asn Leu Gly Arg Thr Cys Leu His Ala Ala Ser		
420	425	430
Gly Gly Asn Val Glu Cys Leu Asn Leu Leu Ser Ser Gly Ala Asp		
435	440	445
Leu Arg Arg Arg Asp Lys Phe Gly Arg Thr Pro Leu His Tyr Ala Ala		
450	455	460
Ala Asn Gly Ser Tyr Gln Cys Ala Val Thr Leu Val Thr Ala Gly Ala		
465	470	475
480		

Gly Val Asn Glu Ala Asp Cys Lys Gly Cys Ser Pro Leu His Tyr Ala
 485 490 495
 Ala Ala Ser Asp Thr Tyr Arg Arg Ala Glu Pro His Thr Pro Ser Ser
 500 505 510
 His Asp Ala Glu Glu Asp Glu Pro Leu Lys Glu Ser Arg Arg Lys Glu
 515 520 525
 Ala Phe Phe Cys Leu Glu Leu Phe Leu Asp Asn Gly Ala Asp Pro Ser
 530 535 540
 Leu Arg Asp Arg Gln Gly Tyr Thr Ala Val His Tyr Ala Ala Ala Tyr
 545 550 555 560
 Gly Asn Arg Gln Asn Leu Glu Leu Leu Leu Glu Met Ser Phe Asn Cys
 565 570 575
 Leu Glu Asp Val Glu Ser Thr Ile Pro Val Ser Pro Leu His Leu Ala
 580 585 590
 Ala Tyr Asn Gly His Cys Glu Ala Leu Lys Thr Leu Ala Glu Thr Leu
 595 600 605
 Val Asn Leu Asp Val Arg Asp His Lys Gly Arg Thr Ala Leu Phe Leu
 610 615 620
 Ala Thr Glu Arg Gly Ser Thr Glu Cys Val Glu Val Leu Thr Ala His
 625 630 635 640
 Gly Ala Ser Ala Leu Ile Lys Glu Arg Lys Arg Lys Trp Thr Pro Leu
 645 650 655
 His Ala Ala Ala Ala Ser Gly His Thr Asp Ser Leu His Leu Ile
 660 665 670
 Asp Ser Gly Glu Arg Ala Asp Ile Thr Asp Val Met Asp Ala Tyr Gly
 675 680 685
 Gln Thr Pro Leu Met Leu Ala Ile Met Asn Gly His Val Asp Cys Val
 690 695 700
 His Leu Leu Leu Glu Lys Gly Ser Thr Ala Asp Ala Asp Leu Arg

705	710	715	720
Gly Arg Thr Ala Leu His Arg Gly Ala Val Thr Gly Cys Glu Asp Cys			
725	730	735	
Leu Ala Ala Leu Leu Asp His Asp Ala Phe Val Leu Cys Arg Asp Phe			
740	745	750	
Lys Gly Arg Thr Pro Ile His Leu Ala Ser Ala Cys Gly His Thr Ala			
755	760	765	
Val Leu Arg Thr Leu Leu Gln Ala Ala Leu Ser Thr Asp Pro Leu Asp			
770	775	780	
Ala Gly Val Asp Tyr Ser Gly Tyr Ser Pro Met His Trp Ala Ser Tyr			
785	790	795	800
Thr Gly Arg Glu Asp Cys Leu Glu Leu Leu Glu His Ser Pro Phe			
805	810	815	
Ser Tyr Leu Glu Gly Asn Pro Phe Thr Pro Leu His Cys Ala Val Ile			
820	825	830	
Asn Asn Gln Asp Ser Thr Thr Glu Met Leu Leu Gly Ala Leu Gly Ala			
835	840	845	
Lys Ile Val Asn Ser Arg Asp Ala Lys Gly Arg Thr Pro Leu His Ala			
850	855	860	
Ala Ala Phe Ala Asp Asn Val Ser Gly Leu Arg Met Leu Leu Gln His			
865	870	875	880
Gln Ala Glu Val Asn Ala Thr Asp His Thr Gly Arg Thr Ala Leu Met			
885	890	895	
Thr Ala Ala Glu Asn Gly Gln Thr Ala Ala Val Glu Phe Leu Leu Tyr			
900	905	910	
Arg Gly Lys Ala Asp Leu Thr Val Leu Asp Glu Asn Lys Asn Thr Ala			
915	920	925	
Leu His Leu Ala Cys Ser Lys Gly His Glu Lys Cys Ala Leu Met Ile			
930	935	940	

Leu Ala Glu Thr Gln Asp Leu Gly Leu Ile Asn Ala Thr Asn Ser Ala
 945 950 955 960
 Leu Gln Met Pro Leu His Ile Ala Ala Arg Asn Gly Leu Ala Ser Val
 965 970 975
 Val Gln Ala Leu Leu Ser His Gly Ala Thr Val Leu Ala Val Asp Glu
 980 985 990
 Glu Gly His Thr Pro Ala Leu Ala Cys Ala Pro Asn Lys Asp Val Ala
 995 1000 1005
 Asp Cys Leu Ala Leu Ile Leu Ser Thr Met Lys Pro Phe Pro Pro Lys
 1010 1015 1020
 Asp Ala Val Ser Pro Phe Ser Phe Ser Leu Leu Lys Asn Cys Ser Ile
 1025 1030 1035 1040
 Ala Ala Ala Lys Thr Val Gly Gly Cys Gly Ala Leu Pro His Gly Ala
 1045 1050 1055
 Ser Cys Pro Tyr Ser Gln Glu Arg Pro Gly Ala Ile Gly Leu Asp Gly
 1060 1065 1070
 Cys Tyr Ser Glu
 1075

<210> 3261

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3261

Met His Ser Pro Arg Thr Gln Ile Ile Trp Phe Cys Phe Thr Lys Ser
 1 5 10 15
 Lys Cys Ser Thr Cys Ile Ser Leu Phe Gln Thr Glu Met Ala Ile Lys

20	25	30
His Val Phe Gln Lys Val Phe Ala Gly Glu Lys Met Arg Lys Val Lys		
35	40	45
Glu Ser Phe Pro Asp Pro Asp Leu Arg Arg Lys Gly Glu Asp Thr Phe		
50	55	60
Cys Phe Val Ala Tyr Leu Leu Trp Ala Lys Ser Tyr Tyr Cys Leu Arg		
65	70	75
Glu Val Arg Leu Thr Leu Ala His Pro Trp Gly Ile Ser Cys Ala Cys		
85	90	95
Gly Gly Glu Thr Asn Gln Val Gly Asn Asn Ser Phe Ser Pro Tyr Leu		
100	105	110
Ser Ser Phe His Val Leu Leu Trp Asn Lys Ser Asp		
115	120	

<210> 3262

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3262

Met Val Leu Leu Leu Phe Cys Cys Cys Leu Arg Arg Ser Phe Val Leu		
1	5	10
Val Ala Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Ser Ser		
20	25	30
Pro Gln Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu		
35	40	45
Pro Ser Ser Trp Asp Tyr Arg His Val Pro Pro Pro His Pro Ala Asn		
50	55	60

Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Asp Gln Ala Gly
 65 70 75 80
 Leu Glu Pro Pro Thr Ser Gly Val Pro Pro Thr Ser Ala Phe Gln Ser
 85 90 95
 Ala Gly Ile Thr Gly Met Ser His Pro Ala Asn Glu Trp Phe Leu Lys
 100 105 110
 Gln Lys Ser Gln
 115

<210> 3263

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3263

Met Gly Met Leu Ser Leu Gly Glu Pro Glu Lys Ala Ser Leu Arg Arg

1 5 10 15

Gln Pro Glu Gly Gly Glu Asp Asn Val Lys Lys Glu Pro Val Thr Ala

20 25 30

Gln Cys Pro Gly Gly Val Gly Val Ser Arg Lys His Ser Arg Gln Arg

35 40 45

Glu Glu Lys Tyr Arg Gly Arg Thr Ala Val Glu His Leu Gln Glu Ile

50 55 60

Leu Cys Gly Trp Thr Thr Ala Gln Gly Lys Arg Gly Thr Ser Gly Gly

65 70 75 80

Arg His Glu Val Gly Lys Glu Met Ala Arg Arg Ser Gln Gly Phe Val

85 90 95

Gly Tyr Ser Gly Val Asn Gly Arg Arg Gln Ala Thr Phe Ser Leu Leu

100 105 110

Ile Ser Phe

115

<210> 3264

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3264

Met Ala Pro Ser Ser Glu Ser Ser Val Pro Ser His Ser Met Ser Ser

1 5 10 15

Arg Arg Asp Thr Asp Ser Asp Thr Gln Asp Ala Asn Asp Ser Ser Cys

20 25 30

Lys Ser Ser Glu Arg Ser Leu Pro Asp Cys Thr Leu His Pro Asn Ser

35 40 45

Ile Ser Ile Asp Ala Gly Pro Arg Gln Ala Pro Lys Ile Ala Gln Ile

50 55 60

Lys Arg Asn Leu Ser Tyr Gly Asp Asn Ser Asp Pro Ala Leu Glu Ala

65 70 75 80

Ser Ser Leu Pro Pro Asp Pro Trp Leu Glu Thr Ser Ser Ser

85 90 95

Pro Ala Glu Pro Ala Gln Pro Gly Ala Cys Arg Arg Asp Gly Tyr Trp

100 105 110

Phe Leu Lys Leu Leu Gln Ala Glu Thr Glu Arg Leu Glu Gly Trp Cys

115 120 125

Cys Gln Met Asp Lys Glu Thr Lys Glu Asn Asn Leu Ser Glu Glu Val

130 135 140

Leu Gly Lys Val Leu Ser Ala Val Gly Ser Ala Gln Leu Leu Met Ser
 145 150 155 160
 Gln Lys Phe Gln Gln Phe Arg Gly Leu Cys Glu Gln Asn Leu Asn Pro
 165 170 175
 Asp Ala Asn Pro Arg Pro Thr Ala Gln Asp Leu Ala Gly Phe Trp Asp
 180 185 190
 Leu Leu Gln Leu Ser Ile Glu Asp Ile Ser Met Lys Phe Asp Glu Leu
 195 200 205
 Tyr His Leu Lys Ala Asn Ser Trp Gln Leu Val Glu Thr Pro Glu Lys
 210 215 220
 Arg Lys Val Ser Met Glu Gln Cys Gly Gly Glu Val Gln Gly Gln Ile
 225 230 235 240
 Pro Gly Arg Gln

<210> 3265

<211> 817

<212> PRT

<213> Homo sapiens

<400> 3265

Met Thr Ser Ala Ala His Ser Glu Asn Tyr Ser Pro Ala Ser Met Val
 1 5 10 15
 Thr Glu Val Leu Trp Ile Leu Ser Asp Gln Lys Glu Cys Ala Val Glu
 20 25 30
 Cys Leu Tyr Asn Asn Ile Val Ile Glu Thr Leu Leu Gln Pro Ile His
 35 40 45
 Asn Leu Met Lys Gly Asn Glu Ala Ser Pro Asn Cys Ser Glu Thr Ala

50	55	60
Leu Ile His Ile Ala Gly Ile Leu Val Arg Ile Ala Ser Val Glu Glu		
65	70	75
Gly Leu Ile Leu Leu Tyr Gly Ala Asn Met Asn Ser Ser Glu Glu		
85	90	95
Ser Pro Thr Gly Ala His Ile Ile Ala Gln Phe Ser Lys Lys Leu Leu		
100	105	110
Asp Glu Asp Ile Ser Ile Phe Ser Gly Ser Glu Met Leu Pro Val Val		
115	120	125
Lys Gly Ala Phe Ile Ser Val Cys Arg His Ile Tyr Ser Thr Cys Glu		
130	135	140
Gly Leu Gln Val Leu Ile Thr Tyr Asn Leu His Glu Ser Ile Ala Lys		
145	150	155
Ala Trp Lys Lys Thr Ser Leu Leu Ser Glu Arg Ile Pro Thr Pro Val		
165	170	175
Glu Gly Ser Asp Ser Val Ser Ser Val Ser Gln Glu Ser Gln Asn Ile		
180	185	190
Met Ala Trp Glu Asp Asn Leu Leu Asp Asp Leu Leu His Phe Ala Ala		
195	200	205
Thr Pro Lys Gly Leu Leu Leu Gln Arg Thr Gly Ala Ile Asn Glu		
210	215	220
Cys Val Thr Phe Ile Phe Asn Arg Tyr Ala Lys Lys Leu Gln Val Ser		
225	230	235
Arg His Lys Lys Phe Gly Tyr Gly Val Leu Val Thr Arg Val Ala Ser		
245	250	255
Thr Ala Ala Gly Gly Ile Ala Leu Lys Ser Gly Phe Ile Asn Glu		
260	265	270
Leu Ile Thr Glu Leu Trp Ser Asn Leu Glu Tyr Gly Arg Asp Asp Val		
275	280	285

Arg Val Thr His Pro Arg Thr Thr Pro Val Asp Pro Ile Asp Arg Ser
 290 295 300
 Cys Gln Lys Ser Phe Leu Ala Leu Val Asn Leu Leu Ser Tyr Pro Ala
 305 310 315 320
 Ile Tyr Glu Leu Val Arg Asn Gln Asp Leu Pro Asn Lys Thr Glu Tyr
 325 330 335
 Ser Leu Arg Glu Val Pro Thr Cys Val Ile Asp Ile Ile Asp Arg Leu
 340 345 350
 Ile Ile Leu Asn Ser Glu Ala Lys Ile Arg Ser Leu Phe Asn Tyr Glu
 355 360 365
 Gln Ser His Ile Phe Gly Leu Arg Leu Leu Ser Val Ile Cys Cys Asp
 370 375 380
 Leu Asp Thr Leu Leu Leu Glu Ala Gln Tyr Gln Val Ser Glu Met
 385 390 395 400
 Leu Leu Asn Ala Gln Glu Glu Asn Ile Leu Glu Ile Ser Glu Ser His
 405 410 415
 Arg Asp Phe Ile Ile Asp Gly Leu Ser Val Glu Arg Asn His Val Leu
 420 425 430
 Val Arg Ile Asn Leu Val Gly Gly Pro Leu Glu Arg Ile Leu Pro Pro
 435 440 445
 Arg Leu Leu Glu Lys Ser Asp Asn Pro Tyr Pro Trp Pro Met Phe Ser
 450 455 460
 Ser Tyr Pro Leu Pro Asn Cys Tyr Leu Ser Asp Ile Thr Arg Asn Ala
 465 470 475 480
 Gly Ile Lys Gln Asp Asn Asp Leu Asp Lys Leu Leu Leu Cys Leu Lys
 485 490 495
 Ile Ser Asp Lys Gln Thr Glu Trp Ile Glu Asn Cys Gln Arg Gln Phe
 500 505 510
 Cys Lys Met Met Lys Ala Lys Pro Asp Ile Ile Ser Gly Glu Ala Leu

515	520	525
Ile Glu Leu Leu Glu Lys Phe Val Leu His Leu Thr Glu Ser Pro Ser		
530	535	540
Glu Cys Tyr Phe Pro Ser Val Glu Tyr Thr Ala Thr Asp Ala Asn Val		
545	550	555
Lys Asn Glu Ser Leu Ser Ser Val Gln Gln Leu Gly Ile Lys Met Thr		
565	570	575
Val Arg Tyr Gly Phe Leu Ser Leu Leu Lys Asp Gly Ala Glu Asn		
580	585	590
Asp Leu Thr Trp Val Leu Lys His Cys Glu Arg Phe Leu Lys Gln Gln		
595	600	605
Gln Thr Ser Ile Lys Ser Ser Leu Leu Cys Leu Gln Gly Asn Tyr Ala		
610	615	620
Gly His Asp Trp Phe Val Ser Ser Leu Phe Met Ile Met Leu Gly Asp		
625	630	635
Lys Glu Lys Thr Phe Gln Phe Leu His Gln Phe Ser Arg Leu Leu Thr		
645	650	655
Ser Ala Phe Leu Trp Leu Pro Arg Leu His Ile Ser Ser Tyr Leu Pro		
660	665	670
Asn Asp Thr Val Glu Ser Gly Ile His Pro Val Tyr Phe Cys Ser Thr		
675	680	685
His Tyr Ile Glu Met Leu Leu Lys Ala Glu Leu Pro Leu Val Phe Ser		
690	695	700
Ala Phe His Met Ser Gly Phe Ala Pro Ser Gln Ile Cys Leu Gln Trp		
705	710	715
Ile Thr Gln Cys Phe Trp Asn Tyr Leu Asp Trp Ile Glu Ile Cys His		
725	730	735
Tyr Ile Ala Thr Cys Val Phe Leu Gly Pro Asp Tyr Gln Val Tyr Ile		
740	745	750

<210> 3266

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3266

Met Phe Ser His Leu Gln Ile Phe Val Phe Pro Gln Thr Lys Arg Lys

1 5 10 15

Lys Thr Thr Leu Tyr Ser Leu Phe Tyr Ser Val Thr Leu Leu Cys Tyr

20 25 30

Val Arg Asn Leu Lys Tyr Ile Gly Asp Val Gly Ile Leu Ser Leu Thr

35 40 45

Ala His Cys Thr Gly Gln Glu Ser Thr Val Phe Gln Leu Glu Phe Arg

50 55 60

Thr Pro Gly Phe Glu Val Glu Asp Asp His Cys Ser Thr Trp Phe Gly

65 70 75 80

Ile Ala Thr Gly Val Ala Lys Pro Lys Glu Gly Tyr Ile Arg Lys Gly

85	90	95
Gly Val Arg Arg Gln Asn Lys Glu Lys Glu Glu Trp Val Phe Tyr Leu		
100	105	110
Phe Ser Phe Ile Asn		
115		

<210> 3267

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3267

Met Phe Arg Phe His Thr Lys Lys Glu His Thr Phe Thr Ile Phe Ser			
---	--	--	--

1	5	10	15
---	---	----	----

Gly Gly Cys Leu Leu Leu His Trp Gln Ala Gly Thr Glu Phe Phe Leu			
---	--	--	--

20	25	30
----	----	----

His Asp Lys Ser Gly Gly Leu Leu Val Arg Glu Pro Met Gly Ile Phe			
---	--	--	--

35	40	45
----	----	----

Ser Trp Lys Glu Tyr Ser Ser Ile Pro Ser Pro Asn Pro Thr Val Ile			
---	--	--	--

50	55	60
----	----	----

Phe Ile Thr Leu Gly Gln Gly Cys Ile Glu Cys Val Cys Val Cys Val			
---	--	--	--

65	70	75	80
----	----	----	----

Cys Val Cys Val Cys Val Cys Val Arg Val Gly Val Val Leu Gly His			
---	--	--	--

85	90	95
----	----	----

Leu Trp Pro Val Thr Lys Val Thr Arg Thr Ile Cys Val Pro Ala Val			
---	--	--	--

100	105	110
-----	-----	-----

Ile Ala Cys Asp Cys Gly Cys Ile Ser Ser Leu Pro Arg Ser Leu Val			
---	--	--	--

115	120	125
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Thr Leu Ser Ala His Gln Gly Arg Glu Leu Ser Thr Asp Thr Cys Gln
130 135 140
Gly Pro Leu
145

<210> 3268

<211> 797

<212> PRT

<213> Homo sapiens

<400> 3268

Met Ala Ala Leu Ala Tyr Asn Leu Gly Lys Arg Glu Ile Asn His Tyr

1 5 10 15

Phe Ser Val Arg Ser Ala Lys Val Leu Ala Leu Val Ala Val Leu Leu

20 25 30

Leu Ala Ala Cys His Leu Ala Ser Arg Arg Tyr Arg Gly Asn Asp Ser

35 40 45

Cys Glu Tyr Leu Leu Ser Ser Gly Arg Phe Leu Gly Glu Lys Val Trp

50 55 60

Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys

65 70 75 80

Asn Cys Leu Val Asp Lys His Ile Ala Phe Ile Gly Asp Ser Arg Ile

85 90 95

Arg Gln Leu Phe Tyr Ser Phe Val Lys Ile Ile Asn Pro Gln Phe Lys

100 105 110

Glu Glu Gly Asn Lys His Glu Asn Ile Pro Phe Glu Asp Lys Thr Ala

115 120 125

Ser Val Lys Val Asp Phe Leu Trp His Pro Glu Val Asn Gly Ser Met

130	135	140
Lys Gln Cys Ile Lys Val Trp Thr Glu Asp Ser Ile Ala Lys Pro His		
145	150	155
Val Ile Val Ala Gly Ala Ala Thr Trp Ser Ile Lys Ile His Asn Gly		
165	170	175
Ser Ser Glu Ala Leu Ser Gln Tyr Lys Met Asn Ile Thr Ser Ile Ala		
180	185	190
Pro Leu Leu Glu Lys Leu Ala Lys Thr Ser Asp Val Tyr Trp Val Leu		
195	200	205
Gln Asp Pro Val Tyr Glu Asp Leu Leu Ser Glu Asn Arg Lys Met Ile		
210	215	220
Thr Asn Glu Lys Ile Asp Ala Tyr Asn Glu Ala Ala Val Ser Ile Leu		
225	230	235
Asn Ser Ser Thr Arg Asn Ser Lys Ser Asn Val Lys Met Phe Ser Val		
245	250	255
Ser Lys Leu Ile Ala Gln Glu Thr Ile Met Glu Ser Leu Asp Gly Leu		
260	265	270
His Leu Pro Glu Ser Ser Arg Glu Thr Thr Ala Met Ile Leu Met Asn		
275	280	285
Val Tyr Cys Asn Lys Ile Leu Lys Pro Val Asp Gly Ser Cys Cys Gln		
290	295	300
Pro Arg Pro Pro Val Thr Leu Ile Gln Lys Leu Ala Ala Cys Phe Phe		
305	310	315
Thr Leu Ser Ile Ile Gly Tyr Leu Ile Phe Tyr Ile Ile His Arg Asn		
325	330	335
Ala His Arg Lys Asn Lys Pro Cys Thr Asp Leu Glu Ser Gly Glu Glu		
340	345	350
Lys Lys Asn Ile Ile Asn Thr Pro Val Ser Ser Leu Glu Ile Leu Leu		
355	360	365

Gln Ser Phe Cys Lys Leu Gly Leu Ile Met Ala Tyr Phe Tyr Met Cys
 370 375 380
 Asp Arg Ala Asn Leu Phe Met Lys Glu Asn Lys Phe Tyr Thr His Ser
 385 390 395 400
 Ser Phe Phe Ile Pro Ile Ile Tyr Ile Leu Val Leu Gly Val Phe Tyr
 405 410 415
 Asn Glu Asn Thr Lys Glu Thr Lys Val Leu Asn Arg Glu Gln Thr Asp
 420 425 430
 Glu Trp Lys Gly Trp Met Gln Leu Val Ile Leu Ile Tyr His Ile Ser
 435 440 445
 Gly Ala Ser Thr Phe Leu Pro Val Tyr Met His Ile Arg Val Leu Val
 450 455 460
 Ala Ala Tyr Leu Phe Gln Thr Gly Tyr Gly His Phe Ser Tyr Phe Trp
 465 470 475 480
 Ile Lys Gly Asp Phe Gly Ile Tyr Arg Val Cys Gln Val Leu Phe Arg
 485 490 495
 Leu Asn Phe Leu Val Val Leu Cys Ile Val Met Asp Arg Pro Tyr
 500 505 510
 Gln Phe Tyr Tyr Phe Val Pro Leu Val Thr Val Trp Phe Met Val Ile
 515 520 525
 Tyr Val Thr Leu Ala Leu Trp Pro Gln Ile Ile Gln Lys Lys Ala Asn
 530 535 540
 Gly Asn Cys Phe Trp His Phe Gly Leu Leu Leu Lys Leu Gly Phe Leu
 545 550 555 560
 Leu Leu Phe Ile Cys Phe Leu Ala Tyr Ser Gln Gly Ala Phe Glu Lys
 565 570 575
 Ile Phe Ser Leu Trp Pro Leu Ser Lys Cys Phe Glu Leu Lys Gly Asn
 580 585 590
 Val Tyr Glu Trp Trp Phe Arg Trp Arg Leu Asp Arg Tyr Val Val Phe

595	600	605
His Gly Met Leu Phe Ala Phe Ile Tyr Leu Ala Leu Gln Lys Arg Gln		
610	615	620
Ile Leu Ser Glu Gly Lys Gly Glu Pro Leu Phe Ser Asn Lys Ile Ser		
625	630	635
Asn Phe Leu Leu Phe Ile Ser Val Val Ser Phe Leu Thr Tyr Ser Ile		
645	650	655
Trp Ala Ser Ser Cys Lys Asn Lys Ala Glu Cys Asn Glu Leu His Pro		
660	665	670
Ser Val Ser Val Val Gln Ile Leu Ala Phe Ile Leu Ile Arg Asn Ile		
675	680	685
Pro Gly Tyr Ala Arg Ser Val Tyr Ser Ser Phe Phe Ala Trp Phe Gly		
690	695	700
Lys Ile Ser Leu Glu Leu Phe Ile Cys Gln Tyr His Ile Trp Leu Ala		
705	710	715
Ala Asp Thr Arg Gly Ile Leu Val Leu Ile Pro Gly Asn Pro Met Leu		
725	730	735
Asn Ile Ile Val Ser Thr Phe Ile Phe Val Cys Val Ala His Glu Ile		
740	745	750
Ser Gln Ile Thr Asn Asp Leu Ala Gln Ile Ile Ile Pro Lys Asp Asn		
755	760	765
Ser Ser Leu Leu Lys Arg Leu Ala Cys Ile Ala Ala Phe Phe Cys Gly		
770	775	780
Leu Leu Ile Leu Ser Ser Ile Gln Asp Lys Ser Lys His		
785	790	795

<210> 3269

<211> 763

<212> PRT

<213> Homo sapiens

<400> 3269

Met His Ser Ser Gln Asn Val Gln Thr Gln Glu Ser Ser Ser Pro Gln
 1 5 10 15
 Ser Gln Lys Phe Leu Pro Ala Val Gln Ser Ser Ser Phe Ala Ser Ser
 20 25 30
 Thr His Cys Gln Thr Leu Gln Asn Asn Ile Thr Ser Pro Asp Pro Lys
 35 40 45
 Ser Tyr Ala Glu Arg Lys Leu Asp Ser Asp Val Tyr Pro Ser Ser Lys
 50 55 60
 Gln Glu Asp Gly Phe Pro Met Gln Glu Leu Gln Val Leu Gln Pro Gln
 65 70 75 80
 Ala Ser Leu Glu Ser Ser Thr Gln Arg Leu Ser Asp Gly Glu Ile Asn
 85 90 95
 Ala Gln Glu Ser Thr Tyr Lys Val Ser Lys Ala Asp Asp Arg Tyr Ser
 100 105 110
 Gln Ser Val Ile Arg Ser Asn Ser Arg Leu Glu Asp Gln Val Ile Gly
 115 120 125
 Val Ala Leu Gln Ala Ser Lys Lys Glu Glu Ser Val Val Gly Ser Val
 130 135 140
 Thr Gln Leu Asn Gln Gln Ile Gly Gln Val Asn Asn Ala Ala Thr Leu
 145 150 155 160
 Asp Leu Lys Asn Ser Thr Asn Leu Ile Gln Thr Pro Gln Ile Arg Leu
 165 170 175
 Asn Thr Lys Asp Leu Lys Gln Gln His Pro Leu Ile Leu Lys Val His
 180 185 190
 Glu Ser Lys Val Gln Glu Gln His Asp Gln Ile Ile Asn Ala Ser Ser

195	200	205
Gln Ile Gln Ile Pro Asn His Ala Leu Gly His His Gln Ala Ser		
210	215	220
Leu Pro Asn Thr Gln Val Leu Leu Asp Ser Ala Cys Asp Leu Gln Ile		
225	230	235
Leu Gln Gln Ser Ile Leu Gln Ala Gly Leu Gly Gln Val Lys Ala Ser		
245	250	255
Leu Gln Ala Gln Arg Val Gln Ser Pro Gln Gln Ile Val His Pro Phe		
260	265	270
Leu Gln Met Glu Gly His Val Ile Gln Ser Asn Gly Asp His Ser Gln		
275	280	285
Gln Gln Leu His Pro Gln Asn Ser Glu Val Met Lys Met Asp Leu Ser		
290	295	300
Glu Ser Ser Lys Pro Leu Gln Gln His Leu Thr Thr Lys Gly His Phe		
305	310	315
Ser Glu Thr Asn Gln His Asp Ser Lys Asn Gln Phe Val Ser Leu Gly		
325	330	335
Ser Met Cys Phe Pro Glu Ala Val Leu Leu Ser Asp Glu Arg Asn Ile		
340	345	350
Leu Ser Asn Val Asp Asp Ile Leu Ala Ala Thr Ala Ala Cys Gly		
355	360	365
Val Thr Pro Thr Asp Phe Ser Lys Ser Thr Ser Asn Glu Thr Met Gln		
370	375	380
Ala Val Glu Asp Gly Asp Ser Lys Ser His Phe Gln Gln Ser Leu Asp		
385	390	395
Val Arg His Val Thr Ser Asp Phe Asn Ser Met Thr Ala Thr Val Gly		
405	410	415
Lys Pro Gln Asn Ile Asn Asp Thr Ser Leu Asn Gly Asn Gln Val Thr		
420	425	430

Val Asn Leu Ser Pro Val Pro Ala Leu Gln Ser Lys Met Thr Leu Asp
 435 440 445
 Gln Gln His Ile Glu Thr Pro Gly Gln Asn Ile Pro Thr Lys Val Thr
 450 455 460
 Ser Ala Val Val Gly Pro Ser His Glu Val Gln Glu Gln Ser Ser Gly
 465 470 475 480
 Pro Phe Lys Lys Gln Ser Ala Thr Asn Leu Glu Ser Glu Glu Asp Ser
 485 490 495
 Glu Ala Pro Val Asp Ser Thr Leu Asn Asn Asn Arg Asn Gln Glu Phe
 500 505 510
 Val Ser Ser Ser Arg Ser Ile Ser Gly Glu Ser Ala Thr Ser Glu Ser
 515 520 525
 Glu Phe Thr Leu Gly Gly Asp Asp Ser Gly Val Ser Met Asn Pro Ala
 530 535 540
 Arg Ser Ala Leu Ala Leu Ala Met Ala Gln Ser Gly Asp Ala Val
 545 550 555 560
 Ser Val Lys Ile Glu Glu Glu Asn Gln Asp Leu Met His Phe Asn Leu
 565 570 575
 Gln Lys Lys Gly Ala Lys Gly Lys Gly Gln Val Lys Glu Glu Asp Asn
 580 585 590
 Ser Asn Gln Lys Gln Leu Lys Arg Pro Ala Gln Gly Lys Arg Gln Asn
 595 600 605
 Pro Arg Gly Thr Asp Ile Tyr Leu Pro Tyr Thr Pro Pro Ser Ser Glu
 610 615 620
 Ser Cys His Asp Gly Tyr Gln His Gln Glu Lys Met Arg Gln Lys Ile
 625 630 635 640
 Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys Thr Gly Phe Ile Ala
 645 650 655
 Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys Gln Gln Phe Ser Thr

660	665	670
Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met		
675	680	685
Val Arg Thr Phe Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr		
690	695	700
Pro Thr Pro Leu Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys		
705	710	715
Val Asp Asn Glu Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser		
725	730	735
Asp Glu Asp Asp Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Pro		
740	745	750
Thr Pro Leu Thr Thr Leu Asp Ala Thr Ser Glu		
755	760	

<210> 3270

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3270

Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Val Ala Asn Lys His		
1	5	10
Ile Lys Lys Ser Ser Thr Leu Leu Ile Ile Arg Glu Met Gln Arg Arg		
20	25	30
Thr Thr Met Arg Tyr His Leu Met Pro Val Arg Met Val Ile Ile Lys		
35	40	45
Lys Ser Lys Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Val Gly Thr		
50	55	60

Leu Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln Pro Leu Trp Lys
 65 70 75 80
 Cys Val Trp Leu Phe Leu Lys Asp Leu Glu Leu Glu Ile Leu Phe Val
 85 90 95
 Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Glu Tyr Lys Pro Phe
 100 105 110
 Tyr Tyr Lys Asp Thr Cys Thr Phe Leu Phe Ile Ala Ala Leu Phe Thr
 115 120 125
 Ile Ala Lys Thr Gln
 130

<210> 3271

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3271

Met Ala Ser Thr Ala Ala Asn Leu Leu Ala Asn Tyr Asn His Ser Cys
 1 5 10 15
 Ser Ser Ser Ile Arg Leu Glu Lys Thr Arg Phe Pro Ser Gly Leu Gly
 20 25 30
 Ala Phe Ser Ser Arg Glu Thr His Gln Pro Ser Ala Cys Val Ala
 35 40 45
 Cys Ala Pro Gly Ala Phe Leu Leu Ile Arg Ser Met Ile Ser Ala Trp
 50 55 60
 Leu Gln Gly Pro Ala Lys Ser Val Arg Glu Pro Pro Asn Gly Ala Arg
 65 70 75 80
 Ser Arg Arg Ile Ser Arg Ser Glu Thr Ser Leu Ser Pro His Leu Leu

85	90	95
----	----	----

Thr Gly Asn Leu Gly Gly Phe Gln Leu Met Phe Phe Ser Pro

100	105	110
-----	-----	-----

<210> 3272

<211> 332

<212> PRT

<213> Homo sapiens

<400> 3272

Met Ala Thr Ile Lys Ser Glu Leu Ile Lys Asn Phe Ala Glu Glu Glu

1	5	10	15
---	---	----	----

Ala Ile His His Asn Lys Ile Ser Ile Val Gly Thr Gly Ser Val Gly

20	25	30
----	----	----

Val Ala Cys Ala Ile Ser Ile Leu Leu Lys Gly Leu Ser Asp Glu Leu

35	40	45
----	----	----

Val Leu Val Asp Val Asp Glu Gly Lys Leu Lys Gly Glu Thr Met Asp

50	55	60
----	----	----

Leu Gln His Gly Ser Pro Phe Met Lys Met Pro Asn Ile Val Ser Ser

65	70	75	80
----	----	----	----

Lys Asp Tyr Leu Val Thr Ala Asn Ser Asn Leu Val Ile Ile Thr Ala

85	90	95
----	----	----

Gly Ala Arg Gln Lys Lys Gly Glu Thr Arg Leu Asp Leu Val Gln Arg

100	105	110
-----	-----	-----

Asn Val Ser Ile Phe Lys Leu Met Ile Pro Asn Ile Thr Gln Tyr Ser

115	120	125
-----	-----	-----

Pro His Cys Lys Leu Leu Ile Val Thr Asn Pro Val Asp Ile Leu Thr

130	135	140
-----	-----	-----

Tyr Val Ala Trp Lys Leu Ser Gly Phe Pro Lys Asn Arg Val Ile Gly
 145 150 155 160
 Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Phe Ile Gly Gln
 165 170 175
 Arg Leu Gly Ile His Ser Glu Ser Cys His Gly Leu Ile Leu Gly Glu
 180 185 190
 His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Ile Ala Gly
 195 200 205
 Val Pro Leu Lys Asp Leu Asn Pro Asp Ile Gly Thr Asp Lys Asp Pro
 210 215 220
 Glu Gln Trp Glu Asn Val His Lys Lys Val Ile Ser Ser Gly Tyr Glu
 225 230 235 240
 Met Val Lys Met Lys Gly Tyr Thr Ser Trp Gly Ile Ser Leu Ser Val
 245 250 255
 Ala Asp Leu Thr Glu Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro
 260 265 270
 Val Ser Thr Leu Ser Lys Gly Leu Tyr Gly Ile Asn Glu Asp Ile Phe
 275 280 285
 Leu Ser Val Pro Cys Ile Leu Gly Glu Asn Gly Ile Thr Asp Leu Ile
 290 295 300
 Lys Val Lys Leu Thr Leu Glu Glu Ala Cys Leu Gln Lys Ser Ala
 305 310 315 320
 Glu Thr Leu Trp Glu Ile Gln Lys Glu Leu Lys Leu
 325 330

<210> 3273

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3273

Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg
 1 5 10 15
 Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Ala Ala Asp
 20 25 30
 Ser Lys Asp Glu Glu Val Lys Val Ala Pro Arg Arg Ser Phe Leu Asp
 35 40 45
 Phe Asp Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val
 50 55 60
 Gln Cys Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu
 65 70 75 80
 Ser Ile Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val
 85 90 95
 Leu Thr Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg
 100 105 110
 His Gln Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr
 115 120 125
 Ser Gly Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro
 130 135 140
 Leu Gln Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala
 145 150 155 160
 Ile Leu Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala
 165 170 175
 Pro His Ala Val His Pro Thr Gly Thr Lys Ala Leu
 180 185

<210> 3274

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3274

Met Phe Phe Val Glu Met Gly Phe Tyr His Val Gly Gln Ala Gly

1

5

10

15

Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser

20

25

30

Ala Gly Ile Thr Gly Val Ser His Tyr Ala Arg Pro Ala Ala Gly

35

40

45

Phe Thr Asn Phe Leu Pro Thr Ala Gly Ala Thr Phe Tyr Ser Lys Glu

50

55

60

Arg Asn Ser Asp His Cys Leu Cys Ser Leu Gly Phe Phe Pro Thr Leu

65

70

75

80

Ser Asn Gly Ile His Gln Phe His Ser Arg Met Ser Ser Leu Val Leu

85

90

95

Gly Leu Glu Asn Trp Ala Trp Leu Met Asp

100

105

<210> 3275

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3275

Met Glu Leu Ala Ile Trp Tyr Val Gln Gln Pro Ser Leu Arg Ile Ala

1	5	10	15												
Lys	Cys	Ile	Gly	Asn	Ile	Phe	Gln	Ala	Val	Thr	Pro	Val	Thr	Ser	Lys
20															30
Gln	Arg	Ser	Cys	Leu	Cys	Leu	Leu	Ala	Leu	Ala	Tyr	Ala	Lys	Gly	Val
35															45
Phe	Asn	Asn	Phe	Gly	Phe	Gln	Leu	Phe	Thr	Leu	Trp	Phe	Gln	Leu	Arg
50															60
Leu	Gly	Arg	Asn	Trp	Pro	Gln	Asp	Lys	Val	Thr	Pro	Glu	Phe	Gly	Thr
65															80
Lys	Pro	Gly	Ala	Lys	Asp	Ser	Asp	Gln	Thr	Ser	Trp	Ala	Ser	Gly	Ser
85															95
Ala	Pro	Arg	Gly	Leu	Lys	Pro	Thr	Arg	Val	Arg	Phe	Gly	Ile	Cys	Arg
100															110
Val															

<210> 3276

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3276

1	5	10	15												
Met	Ala	Pro	Ala	Ser	Val	Pro	Ser	Ser	Leu	Gln	Gly	Gly	Leu	Gly	Ala
20															30
Cys	Leu	Gly	Arg	Lys	Glu	Arg	Arg	Cys	Arg	Ser	Ala	Trp	Gly	Gly	Cys
35															45
Ser	Arg	Arg	Trp	Pro	Gln	Ala	Gln	Ala	Pro	Gln	Gly	Leu	Phe	Pro	Pro

Ala Arg Pro Gly Arg Ala Ala Trp Trp Arg Val Arg Glu Asp Pro Gly
 50 55 60
 Gly Gly Pro Ser Cys Lys Asn Trp Trp Gly Pro Arg Ser Pro Pro Ser
 65 70 75 80
 Arg Gly Gly Leu Leu Pro Phe Gly Cys Cys Val Gln Ser Pro Val
 85 90 95
 Ser Cys Ser Leu Arg Leu Tyr Pro Ala Ala Phe Pro Pro Ala Gly Glu
 100 105 110
 Ala Arg Ala Ala Leu Cys Trp Pro Val Leu Pro Leu Pro Thr Arg Val
 115 120 125
 Pro Trp Trp Ser Cys Arg Gly Ala His Val Thr Ser Leu Pro Thr Gly
 130 135 140
 Val Arg Ala Gly Pro Gln Pro Glu Arg Glu Arg Pro Gln Ala Cys Ala
 145 150 155 160
 Gly Gly Gly Asn Gly Gln Leu Arg Val Val Val Pro Gly Ala Leu His
 165 170 175
 Ser Arg Gly Arg Gly Cys Val Arg Gly Val Arg Gly Ile Val Cys Pro
 180 185 190
 Ala Ala Gly Thr Gln
 195

<210> 3277

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3277

Met Ala Thr Val Gly Glu Arg Arg Pro Leu Pro Ser Pro Glu Val Met

1	5	10	15
Leu Gly Gln Ser Trp Asn Leu Trp Val Glu Ala Ser Lys Leu Pro Gly			
20	25	30	
Lys Asp Gly Thr Glu Leu Asp Glu Ser Phe Lys Glu Phe Gly Lys Asn			
35	40	45	
Arg Glu Val Met Gly Leu Cys Arg Glu Asp Met Pro Ile Phe Gly Phe			
50	55	60	
Cys Pro Ala His Asp Asp Phe Tyr Leu Val Val Cys Asn Asp Cys Asn			
65	70	75	80
Gln Val Val Lys Pro Gln Ala Phe Gln Ser His Tyr Glu Arg Arg His			
85	90	95	
Ser Ser Ser Ser Lys Pro Pro Leu Ala Val Pro Pro Thr Ser Val Phe			
100	105	110	
Ser Phe Phe Pro Ser Leu Ser Lys Ser Lys Gly Gly Ser Ala Ser Gly			
115	120	125	
Ser Asn Arg Ser Ser Gly Gly Val Leu Ser Ala Ser Ser Ser			
130	135	140	
Ser Lys Leu Leu Lys His Pro Leu Thr Lys Asn Tyr Ser			
145	150	155	

<210> 3278

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3278

Met Asn Leu Pro Arg Ala Glu Arg Pro Arg Ser Thr Pro Gln Arg Ser

1 5 10 15

Leu Arg Asp Ser Asp Gly Glu Asp Gly Lys Ile Asp Val Leu Gly Glu
 20 25 30
 Glu Glu Asp Glu Asp Glu Val Glu Asp Glu Glu Glu Ala Ser Gln
 35 40 45
 Lys Phe Leu Glu Gln Ser Leu Gln Pro Gly Leu Gln Val Ala Arg Trp
 50 55 60
 Gly Gly Val Ala Leu Pro Arg Glu His Ile Glu Gly Gly Pro Ser
 65 70 75 80
 Asp Pro Ser Glu Phe Gly Thr Glu Phe Arg Ala Pro Pro Arg Ser Ala
 85 90 95
 Ala Ala Ser Glu Asp Ala Arg Gln Pro Ala Lys Pro Pro Tyr Ser Tyr
 100 105 110
 Ile Ala Leu Ile Thr Met Ala Ile Leu Gln Ser Pro His Lys Arg Leu
 115 120 125
 Thr Leu Ser Gly Ile Cys Ala Phe Ile Ser Gly Arg Phe Pro Tyr Tyr
 130 135 140
 Arg Arg Lys Phe Pro Ala Trp Gln Asn Ser Ile Arg His Asn Leu Ser
 145 150 155 160
 Leu Asn Asp Cys Phe Val Lys Ile Pro Arg Glu Pro Gly His Pro Gly
 165 170 175
 Lys Gly Thr Tyr Trp Ser Leu Asp Pro Ala Ser Gln Asp Met Phe Asp
 180 185 190
 Asn Gly Ser Phe Leu Arg Arg Lys Arg Phe Lys Arg His Gln Leu
 195 200 205
 Thr Pro Gly Ala His Leu Pro His Pro Phe Pro Leu Pro Ala Ala His
 210 215 220
 Ala Ala Leu His Asn Pro Arg Pro Gly Pro Leu Leu Gly Ala Pro Ala
 225 230 235 240
 Leu Pro Gln Pro Val Pro Gly Ala Tyr Pro Asn Thr Ala Pro Gly Arg

245	250	255
Arg Pro Tyr Ala Leu Leu His Pro His Pro Pro Arg Tyr Leu Leu Leu		
260	265	270
Ser Ala Pro Ala Tyr Ala Gly Ala Pro Lys Lys Ala Glu Gly Ala Asp		
275	280	285
Leu Ala Thr Pro Gly Thr Leu Pro Val Leu Gln Pro Ser Leu Gly Pro		
290	295	300
Gln Pro Trp Glu Glu Gly Lys Gly Leu Ala Ser Pro Pro Gly Gly Gly		
305	310	315
Cys Ile Ser Phe Ser Ile Glu Ser Ile Met Gln Gly Val Arg Gly Ala		
325	330	335
Gly Thr Gly Ala Ala Gln Ser Leu Ser Pro Thr Ala Trp Ser Tyr Cys		
340	345	350
Pro Leu Leu Gln Arg Pro Ser Ser Leu Ser Asp Asn Phe Ala Ala Thr		
355	360	365
Ala Ala Ala Ser Gly Gly Leu Arg Gln Arg Leu Arg Ser His Gln		
370	375	380
Gly Arg Gly Ala Gly Arg Ala Pro Val Gly Arg Val Gly Ala Ala Ala		
385	390	395
Val Ser Gly Gly Arg Gly Leu		
405		

<210> 3279

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3279

Met Gly Asp Leu Leu Pro Arg Ala Trp Pro Gly Ala Gly Cys Thr Glu
 1 5 10 15
 Thr Gln Thr Thr Ser Gln Gly Pro Gln Glu Leu Ala Val Pro Thr Ala
 20 25 30
 Glu Cys Tyr Ser Cys Ser Phe Tyr Phe Cys Val Cys Pro Glu Ala Leu
 35 40 45
 Pro Gln Glu Glu Gln Glu Gly Ser Gly Ser Glu Glu Arg Gly Glu Glu
 50 55 60
 Lys Gly Thr Ser Ser Pro Asp Tyr Arg His Tyr Leu Arg Met Trp Ala
 65 70 75 80
 Lys Glu Lys Glu Ala Gln Lys Glu Thr Ile Lys Asp Leu Pro Lys Met
 85 90 95
 Asn Gln Glu Gln Phe Ile Glu Leu Cys Lys Thr Leu Tyr Asn Met Phe
 100 105 110
 Ser Glu Asp Pro Met Glu Gln Asp Leu Tyr His Ala Ile Ala Thr Val
 115 120 125
 Ala Ser Leu Leu Leu Arg Ile Gly Glu Val Gly Lys Lys Phe Ser Ala
 130 135 140
 Arg Thr Gly Arg Lys Pro Arg Asp Cys Ala Thr Gly Glu Asp Glu Pro
 145 150 155 160
 Pro Ala Pro Glu Leu His Gln Asp Ala Ala Arg Glu Leu Gln Pro Pro
 165 170 175
 Ala Ala Gly Asp Pro Gln Ala Lys Ala Gly Gly Asp Thr His Leu Gly
 180 185 190
 Thr Ala Pro Gln Glu Ser Gln Val Val Val Glu Gly Gly Ser Gly Glu
 195 200 205
 Gly Gln Gly Ser Pro Ser Gln Leu Leu Ser Asp Asp Glu Thr Lys Asp
 210 215 220
 Asp Met Ser Met Ser Ser Tyr Ser Val Val Ser Thr Gly Ser Leu Gln

225	230	235	240
Cys Glu Asp Leu Ala Asp Asp Thr Val Leu Val Gly Gly Glu Ala Cys			
245	250	255	
Ser Ser Thr Ala Arg Ile Gly Gly Thr Val Asp Thr Asp Trp Cys Ile			
260	265	270	
Ser Phe Glu Gln Ile Leu Ala Ser Ile Leu Thr Glu Ser Val Leu Val			
275	280	285	
Asn Phe Phe Glu Lys Arg Val Asp Ile Gly Leu Lys Ile Lys Asp Gln			
290	295	300	
Lys Lys Val Glu Arg Gln Phe Ser Thr Ala Ser Asp His Glu Gln Pro			
305	310	315	320
Gly Val Ser Gly			

<210> 3280

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3280

Met Phe His Arg Thr Pro Pro Arg Arg Ser Phe Pro Asn Pro Ser Trp

1	5	10	15
---	---	----	----

Lys Gly Pro Gly Ser Lys Gly His Gln Ser Cys Leu Ser Asp Gln Leu

20	25	30
----	----	----

Ala Val Ser Ser Gly Cys Trp Pro Glu Thr Ala Leu Ala Leu Ser Lys

35	40	45
----	----	----

Val Thr Val His Cys Leu Ala Ile Ala Ser Leu Ser Gly Pro Ala Leu

50	55	60
----	----	----

Gly Leu Val Arg Leu Leu Gln His Pro Trp Leu Phe Pro Trp Gln Cys
 65 70 75 80
 Asp Tyr Pro Ala Leu Thr Gln Ser Lys Gly Val Pro Leu Ser Trp Val
 85 90 95
 Lys Phe Thr Arg Arg Leu Leu Lys Cys Leu Leu Arg Gly Asn Leu Cys
 100 105 110
 Leu Ser
 115 120 125
 Leu Ser Leu Ser Leu Ser Gln Cys Ile Ser Leu Leu Ser Phe Thr Phe
 130 135 140
 Pro Phe Phe Leu Ser Lys Asn Asn Val Leu Val Glu Ala Leu Val Thr
 145 150 155 160
 Leu Ile Asn Gln Asn Leu Pro Phe Pro Val Ser Leu Phe Leu Arg Pro
 165 170 175
 Phe His Pro His Tyr Leu Leu Pro Arg Asn Met Thr Asp His Gln
 180 185 190
 Asp Ala Ala Arg Arg Glu Asp Leu Ser Gln Lys Pro Thr Ser Lys Met
 195 200 205
 Gly Gly Arg Cys Gly Leu Arg Ser Ser Ala Met His Pro Lys Pro Leu
 210 215 220
 Thr Phe Pro Leu Trp Lys Cys Thr Gly
 225 230

<210> 3281

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3281

Met Ala Ala Val Glu Lys Arg Arg Gln Ala Val Pro Pro Pro Ala Gly
 1 5 10 15
 Phe Thr Asp Ser Gly Arg Gln Ser Val Ser Arg Ala Ala Gly Ala Ala
 20 25 30
 Glu Ser Glu Glu Asp Phe Leu Arg Gln Val Gly Val Thr Glu Met Leu
 35 40 45
 Arg Ala Ala Leu Leu Lys Val Leu Glu Ala Arg Pro Glu Glu Pro Ile
 50 55 60
 Ala Phe Leu Ala His Tyr Phe Glu Asn Met Gly Leu Arg Ser Pro Val
 65 70 75 80
 Asn Gly Gly Ala Gly Glu Pro Pro Gly Gln Leu Leu Leu Gln Gln Gln
 85 90 95
 Arg Leu Gly Arg Ala Leu Trp His Leu Arg Leu Ala His His Ser Arg
 100 105 110
 Arg Cys Ala Val Gly Arg Leu Gly Arg Val Gly Gln Arg Trp Thr Ser
 115 120 125
 Thr Pro Ser Met Pro Arg Ala Ala Pro Tyr Pro Gln Arg Arg Arg Arg
 130 135 140
 Gly Pro Gly Leu Ala Gly Ser Cys Ser Ala Arg Cys Leu Leu Gly Trp
 145 150 155 160
 Asp Gly Ser Asp Lys Val Gly Trp Arg Val Arg Ala Ser Val Arg Arg
 165 170 175

<210> 3282

<211> 924

<212> PRT

<213> Homo sapiens

<400> 3282

Met Ile Ser Gln Thr Gln Ser Leu Gly Gly Pro Pro Leu Glu His Glu
 1 5 10 15
 Val Pro Gly His Pro Pro Gly Gly Asp Met Gly Gln Gln Met Asn Met
 20 25 30
 Met Ile Gln Arg Leu Gly Gln Asp Ser Leu Thr Pro Glu Gln Val Ala
 35 40 45
 Trp Arg Lys Leu Gln Glu Glu Tyr Tyr Glu Glu Lys Arg Arg Lys Glu
 50 55 60
 Glu Gln Ile Gly Leu His Gly Ser Arg Pro Leu Gln Asp Met Met Gly
 65 70 75 80
 Met Gly Gly Met Met Val Arg Gly Pro Pro Pro Tyr His Ser Lys
 85 90 95
 Pro Gly Asp Gln Trp Pro Pro Gly Met Gly Ala Gln Leu Arg Gly Pro
 100 105 110
 Met Asp Val Gln Asp Pro Met Gln Leu Arg Gly Pro Pro Phe Pro
 115 120 125
 Gly Pro Arg Phe Pro Gly Asn Gln Ile Gln Arg Val Pro Gly Phe Gly
 130 135 140
 Gly Met Gln Ser Met Pro Met Glu Val Pro Met Asn Ala Met Gln Arg
 145 150 155 160
 Pro Val Arg Pro Gly Met Gly Trp Thr Glu Asp Leu Pro Pro Met Gly
 165 170 175
 Gly Pro Ser Asn Phe Ala Gln Asn Thr Met Pro Tyr Pro Gly Gly Gln
 180 185 190
 Gly Glu Ala Glu Arg Phe Met Thr Pro Arg Val Arg Glu Glu Leu Leu
 195 200 205
 Arg His Gln Leu Leu Glu Lys Arg Ser Met Gly Met Gln Arg Pro Leu

210	215	220
Gly Met Ala Gly Ser Gly Met Gly Gln Ser Met Glu Met Glu Arg Met		
225	230	235
Met Gln Ala His Arg Gln Met Asp Pro Ala Met Phe Pro Gly Gln Met		240
245	250	255
Ala Gly Gly Glu Gly Leu Ala Gly Thr Pro Met Gly Met Glu Phe Gly		
260	265	270
Gly Gly Arg Gly Leu Leu Ser Pro Pro Met Gly Gln Ser Gly Leu Arg		
275	280	285
Glu Val Asp Pro Pro Met Gly Pro Gly Asn Leu Asn Met Asn Met Asn		
290	295	300
Val Asn Met Asn Met Asn Met Asn Leu Asn Val Gln Met Thr Pro Gln		
305	310	315
Gln Gln Met Leu Met Ser Gln Lys Met Arg Gly Pro Gly Asp Leu Met		320
325	330	335
Gly Pro Gln Gly Leu Ser Pro Glu Glu Met Ala Arg Val Arg Ala Gln		
340	345	350
Asn Ser Ser Gly Val Met Gly Gly Pro Gln Lys Met Leu Met Pro Ser		
355	360	365
Gln Phe Pro Asn Gln Gly Gln Gln Gly Phe Ser Gly Gly Gln Gly Pro		
370	375	380
Tyr Gln Ala Met Ser Gln Asp Met Gly Asn Thr Gln Asp Met Phe Ser		
385	390	395
Pro Asp Gln Ser Ser Met Pro Met Ser Asn Val Gly Thr Thr Arg Leu		400
405	410	415
Ser His Met Pro Leu Pro Pro Ala Ser Asn Pro Pro Gly Thr Val His		
420	425	430
Ser Ala Pro Asn Arg Gly Leu Gly Arg Arg Pro Ser Asp Leu Thr Ile		
435	440	445

Ser Ile Asn Gln Met Gly Ser Pro Gly Met Gly His Leu Lys Ser Pro
 450 455 460
 Thr Leu Ser Gln Val His Ser Pro Leu Val Thr Ser Pro Ser Ala Asn
 465 470 475 480
 Leu Lys Ser Pro Gln Thr Pro Ser Gln Met Val Pro Leu Pro Ser Ala
 485 490 495
 Asn Pro Pro Gly Pro Leu Lys Ser Pro Gln Val Leu Gly Ser Ser Leu
 500 505 510
 Ser Val Arg Ser Pro Thr Gly Ser Pro Ser Arg Leu Lys Ser Pro Ser
 515 520 525
 Met Ala Val Pro Ser Pro Gly Trp Val Ala Ser Pro Lys Thr Ala Met
 530 535 540
 Pro Ser Pro Gly Val Ser Gln Asn Lys Gln Pro Pro Leu Asn Met Asn
 545 550 555 560
 Ser Ser Thr Thr Leu Ser Asn Met Glu Gln Gly Thr Leu Pro Pro Ser
 565 570 575
 Gly Pro Arg Ser Ser Ser Ala Pro Pro Ala Asn Pro Pro Ser Gly
 580 585 590
 Leu Met Asn Pro Ser Leu Pro Phe Thr Ser Ser Pro Asp Pro Thr Pro
 595 600 605
 Ser Gln Asn Pro Leu Ser Leu Met Met Thr Gln Met Ser Lys Tyr Ala
 610 615 620
 Met Pro Ser Ser Thr Pro Leu Tyr His Asn Ala Ile Lys Thr Ile Ala
 625 630 635 640
 Thr Ser Asp Asp Glu Leu Leu Pro Asp Arg Pro Leu Leu Pro Pro Pro
 645 650 655
 Pro Pro Pro Gln Gly Ser Gly Pro Gly Ile Ser Asn Ser Gln Pro Ser
 660 665 670
 Gln Met His Leu Asn Ser Ala Ala Gln Ser Pro Met Gly Met Asn

675	680	685
Leu Pro Gly Gln Gln Pro Leu Ser His Glu Pro Pro Pro Ala Met Leu		
690	695	700
Pro Ser Pro Thr Pro Leu Gly Ser Asn Ile Pro Leu His Pro Asn Ala		
705	710	715
Gln Gly Thr Gly Gly Pro Pro Gln Asn Ser Met Met Met Ala Pro Gly		
725	730	735
Gly Pro Asp Ser Leu Asn Ala Pro Cys Gly Pro Val Pro Ser Ser Ser		
740	745	750
Gln Met Met Pro Phe Pro Pro Arg Leu Gln Gln Pro His Gly Ala Met		
755	760	765
Ala Pro Thr Gly Gly Gly Gly Pro Gly Leu Gln Gln His Tyr		
770	775	780
Pro Ser Gly Met Ala Leu Pro Pro Glu Asp Leu Pro Asn Gln Pro Pro		
785	790	795
Gly Pro Met Pro Pro Gln Gln His Leu Met Gly Lys Ala Met Ala Gly		
805	810	815
Arg Met Gly Asp Ala Tyr Pro Pro Gly Val Leu Pro Gly Val Ala Ser		
820	825	830
Val Leu Asn Asp Pro Glu Leu Ser Glu Val Ile Arg Pro Thr Pro Thr		
835	840	845
Gly Ile Pro Glu Phe Asp Leu Ser Arg Ile Ile Pro Ser Trp Phe Leu		
850	855	860
Arg Thr Arg Pro Phe Ser Phe Cys Leu Tyr Leu Leu Arg Ile Leu Ser		
865	870	875
Leu Leu Met Trp Leu Thr Pro Leu Pro Pro Leu Pro Ala Gly Gly Trp		
885	890	895
Pro Gly Gly Gln Val Pro Ala Gly Ala Val Asn Arg Ala Leu Arg Phe		
900	905	910

Cys Ala Gly Leu Cys Val Cys Cys Ile Ser Val Phe

915

920

<210> 3283

<211> 428

<212> PRT

<213> Homo sapiens

<400> 3283

Met Ser Ser Gly Leu Arg Ala Ala Asp Phe Pro Arg Trp Lys Arg His

1

5

10

15

Ile Ser Glu Gln Leu Arg Arg Asp Arg Leu Gln Arg Gln Ala Phe

20

25

30

Glu Glu Ile Ile Leu Gln Tyr Asn Lys Leu Leu Glu Lys Ser Asp Leu

35

40

45

His Ser Val Leu Ala Gln Lys Leu Gln Ala Glu Lys His Asp Val Pro

50

55

60

Asn Arg His Glu Ile Arg Arg Gln Ala Arg Leu Gln Lys Glu Leu

65

70

75

80

Ala Glu Ala Ala Lys Glu Pro Leu Pro Val Glu Gln Asp Asp Ile

85

90

95

Glu Val Ile Val Asp Glu Thr Ser Asp His Thr Glu Glu Thr Ser Pro

100

105

110

Val Arg Ala Ile Ser Arg Ala Ala Thr Lys Arg Leu Ser Gln Pro Ala

115

120

125

Gly Gly Leu Leu Asp Ser Ile Thr Asn Ile Phe Gly Arg Arg Ser Val

130

135

140

Ser Ser Phe Pro Val Pro Gln Asp Asn Val Asp Thr His Pro Gly Ser

145	150	155	160
Gly Lys Glu Val Arg Val Pro Ala Thr Ala Leu Cys Val Phe Asp Ala			
165	170	175	
His Asp Gly Glu Val Asn Ala Val Gln Phe Ser Pro Gly Ile Thr Ser			
180	185	190	
Ile Glu Phe Asp Ser Ala Gly Ser Tyr Leu Leu Ala Ala Ser Asn Asp			
195	200	205	
Phe Ala Ser Arg Ile Trp Thr Val Asp Asp Tyr Arg Leu Arg His Thr			
210	215	220	
Leu Thr Gly His Ser Gly Lys Val Leu Ser Ala Lys Phe Leu Leu Asp			
225	230	235	240
Asn Ala Arg Ile Val Ser Gly Ser His Asp Arg Thr Leu Lys Leu Trp			
245	250	255	
Asp Leu Arg Ser Lys Val Cys Ile Lys Thr Val Phe Ala Gly Ser Ser			
260	265	270	
Cys Asn Asp Ile Val Cys Thr Glu Gln Cys Val Met Ser Gly His Phe			
275	280	285	
Asp Lys Ile Arg Phe Trp Asp Ile Arg Ser Glu Ser Ile Val Arg			
290	295	300	
Glu Met Glu Leu Leu Gly Lys Ile Thr Ala Leu Asp Leu Asn Pro Glu			
305	310	315	320
Arg Thr Glu Leu Leu Ser Cys Ser Arg Asp Asp Leu Leu Lys Val Ile			
325	330	335	
Asp Leu Arg Thr Asn Ala Ile Lys Gln Thr Phe Ser Ala Pro Gly Phe			
340	345	350	
Lys Cys Gly Ser Asp Trp Thr Arg Val Val Phe Ser Pro Asp Gly Ser			
355	360	365	
Tyr Val Ala Ala Gly Ser Ala Glu Gly Ser Leu Tyr Ile Trp Ser Val			
370	375	380	

Leu Thr Gly Lys Val Glu Lys Val Leu Ser Lys Gln His Ser Ser Ser
 385 390 395 400
 Ile Asn Ala Val Ala Trp Ser Pro Ser Gly Ser His Val Val Ser Val
 405 410 415
 Asp Lys Gly Cys Lys Ala Val Leu Trp Ala Gln Tyr
 420 425

<210> 3284

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3284

Met Arg Met Val Pro Met Glu Met Phe Asn Tyr Cys Ser Gln Leu Glu
 1 5 10 15

Asp Glu Asn Ser Ser Ala Gly Leu Asp Ile Pro Gly Pro Pro Cys Thr
 20 25 30

Lys Ala Ser Pro Glu Pro Ala Lys Pro Lys Pro Gly Ala Gln His Ser
 35 40 45

Leu Pro Thr Glu Ala Glu Ala Pro Ala Gly Glu Arg Glu Ala Ser His
 50 55 60

Gly His Gly Asp His Cys Arg Gly Arg Val Arg Arg Arg Leu His His
 65 70 75 80

Asp Gly Gly Gly Arg Cys Leu Trp Leu His Leu Arg Leu Pro His Gly
 85 90 95

Gln Val Pro Pro Gly Ala Gln Lys Ala Pro Ala Pro Asp Gly Gly Pro
 100 105 110

Arg Gly Arg Ala Arg Gly Pro Glu Ala Asp Leu Phe Cys Gly Leu Ser

115 120 125

Ala His Pro His Pro Ala Arg

130 135

<210> 3285

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3285

Met Glu His Phe Gly Ser Gly Leu Met Gly Glu Ser Pro Phe Ile Phe

1 5 10 15

Leu His Leu Gly Gln Leu His Ser Lys Glu Arg Asn Lys Gly His Val

20 25 30

Leu Pro Lys Ala Ser Gly Leu Thr Gly Gln Ser Gln Pro Phe Arg Glu

35 40 45

Gly Met Ser Pro Lys Glu Gly Ser Pro Phe Phe Pro Glu His Pro Pro

50 55 60

Leu Ser Ala Glu Leu Leu Pro Thr His Pro Ser Thr Ile Ala Leu

65 70 75 80

Ser Thr Val Cys Pro Cys Gln Asn Pro Ser Pro Thr Cys Leu Ala Trp

85 90 95

Tyr Pro Ser Leu Gly Gly Arg Gln

100

<210> 3286

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3286

Met Leu Gly Ile Ser Ala Ile Gly Gly Leu Cys Cys Leu His Arg Leu
1 5 10 15
Tyr Ser Cys Ile Pro Gly Glu Gly Arg Ala Ala Lys Glu Lys Ser
20 25 30
Gln Ser Gln Gln Pro Ala Leu Arg Pro Ser Lys Leu Cys Thr Gly Gly
35 40 45
Leu Gly Ser Ala Leu Trp Ala Arg Gly Ala Gly Lys Arg Ala Gly Arg
50 55 60
Gly Thr Ala Ala Thr Ser Ala Arg Ala Ala Gln Glu Ala Pro Pro Tyr
65 70 75 80
Thr Ala Leu Gln Val Pro Gln Arg Glu Gln Pro Met Leu Pro Lys His
85 90 95
Pro Leu His Thr His Gln Gly Ser Trp Arg Arg Glu Val Pro Gln Gly
100 105 110
Lys Ala Pro Ser Pro Arg Arg Ala Ser Gly Pro Gly Leu Leu Trp Leu
115 120 125
Pro Thr Ala Ile Ile Ser Ile Tyr Arg Ala Gln Ser
130 135 140

<210> 3287

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3287

Met Ser Leu Leu Pro Asn Ser His Gln Ile Phe Leu Ile Glu Phe Leu

1	5	10	15
---	---	----	----

Val Leu Val Pro Asp Arg Thr Asn Asp Ser Pro Asn Leu Pro Val Phe

20	25	30
----	----	----

Met Arg Glu Lys Glu Lys Gly Ile Lys Gly Gly Arg Lys Lys Pro

35	40	45
----	----	----

Asn Ser Val Tyr Gly Glu Lys Gly Phe Cys Phe Ser Pro Asn Leu Gly

50	55	60
----	----	----

Gly Gly Arg Gly Gly Phe Ser Phe Tyr Phe Cys Phe Cys Phe Tyr Leu

65	70	75	80
----	----	----	----

Gly Phe Cys Phe Ser His Val Tyr Ser Ala Arg Ser Val Glu Gly Gly

85	90	95
----	----	----

Leu Gly Glu Gly Glu Leu Glu Lys Glu Leu Met Gly Ser Tyr Pro Gly

100	105	110
-----	-----	-----

Leu

<210> 3288

<211> 209

<212> PRT

<213> Homo sapiens

<400> 3288

Met Lys Gly Gly Ala Gly Gly Ala Arg Pro Pro Pro Gly Arg Pro Val

1	5	10	15
---	---	----	----

Arg Ser Gly Ala Asn Ala Ile Pro Gly Pro Thr Ala Arg Gly Arg Cys

20	25	30
----	----	----

Gly Pro Pro Asn Pro Pro Pro Arg Pro Gly Trp Gly Gly Gly Ala Gly
 35 40 45
 Gly Asp Gln Arg Leu Val Ser Leu Arg Ser Asp Leu Arg Gln Arg Gly
 50 55 60
 Arg Asp Ile Met Thr Val Gly Ala Arg Leu Arg Ser Lys Ala Glu Ser
 65 70 75 80
 Ser Leu Leu Arg Arg Gly Pro Arg Gly Arg Gly Arg Thr Glu Gly Asp
 85 90 95
 Glu Glu Ala Ala Ala Ile Leu Glu His Leu Glu Tyr Ala Asp Glu Ala
 100 105 110
 Glu Ala Ala Ala Glu Ser Gly Thr Ser Ala Ala Asp Glu Arg Gly Pro
 115 120 125
 Gly Thr Arg Gly Ala Arg Arg Val His Phe Ala Leu Leu Pro Glu Arg
 130 135 140
 Tyr Glu Pro Leu Glu Glu Pro Ala Pro Ser Glu Gln Pro Arg Lys Arg
 145 150 155 160
 Tyr Arg Arg Lys Leu Lys Lys Tyr Gly Lys Asn Val Gly Lys Val Ile
 165 170 175
 Ile Lys Gly Cys Arg Tyr Val Val Ile Gly Leu Gln Gly Phe Ala Ala
 180 185 190
 Ala Tyr Ser Ala Pro Phe Ala Val Ala Thr Ser Val Val Ser Phe Val
 195 200 205
 Arg

<210> 3289

<211> 107

<212> PRT

●
<213> Homo sapiens

<400> 3289

Met Lys Ala Trp Ser Asn Ala Met Trp Ser Ser Gly Lys Pro Gln Asn			
1	5	10	15
Gly Val Ser Ser Trp Thr Ser Cys Ile Arg Val His Thr Pro Gln Gly			
20	25	30	
Leu Asn Pro Cys Pro Leu Ser Lys Glu Leu Gly Leu Asn Ala Val Arg			
35	40	45	
Asp Cys Leu Phe Val Val Ile Phe Ile Glu Arg Ser Ser Phe Pro Leu			
50	55	60	
Pro Pro Trp Leu Ser Gln Leu Val Val Ile Ala Asp Ser Phe Pro Glu			
65	70	75	80
Arg Thr Phe Asn Arg Phe Lys Lys Asn Val Leu Asp Trp Val Pro Lys			
85	90	95	
Lys Gln Ser Leu Lys Gln Gly Phe Val Cys Lys			
100	105		

<210> 3290

<211> 357

<212> PRT

<213> Homo sapiens

<400> 3290

Met Leu Gln Gln Ile Leu His Asp Met Tyr Ile Asp Pro Glu Leu Leu			
1	5	10	15
Ala Glu Leu Ser Asp Val Gln Lys His Ile Leu Phe Tyr Lys Met Arg			
20	25	30	

Glu Glu Gln Leu Arg Arg Trp Lys Glu Arg Glu Thr Trp Glu Ala Leu
 35 40 45
 Ala Gln Asp Glu Gly Leu Arg Pro Pro Lys Thr Lys Arg Ala Ala Ser
 50 55 60
 Asp Lys His Ile Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val
 65 70 75 80
 Trp Ile Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu Ile Ser
 85 90 95
 Glu Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala
 100 105 110
 Glu Glu Leu Trp Arg Gln Lys Glu Ala Glu Ile Thr Lys Lys Phe Arg
 115 120 125
 Asp Ala Leu Ala Asn Glu Lys Ala Arg Ile Leu Ala Glu Lys Trp Lys
 130 135 140
 Val Glu Met Glu Gly Arg Lys Ala Ala Lys Val Leu Glu Glu Arg Ile
 145 150 155 160
 His Glu Glu Phe Lys Arg Lys Glu Glu Glu Glu Arg Lys Arg Gly Glu
 165 170 175
 Glu Arg Ile Arg Leu Gln Glu Glu Gln Arg Ala Lys Glu Leu Tyr Trp
 180 185 190
 Thr Leu Lys Gln Ala Gln Leu His Cys Gln Ala Ser Glu Lys Glu Glu
 195 200 205
 Arg Glu Trp Glu Glu Gln Leu Arg Arg Ser Lys Ala Ala Asp Glu Glu
 210 215 220
 Arg Ser Arg Arg Ala Gln Arg Ala Arg Asp Glu Tyr Arg His His Ser
 225 230 235 240
 Leu Arg Ala Ile Gln Lys Gly Thr Val Ala Gly Leu Ser Ser Met Phe
 245 250 255
 Arg Glu Leu Gly Gln Ser His Glu Gln Glu Ala Arg Leu Tyr His His

260	265	270
Leu Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Arg Thr		
275	280	285
Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp		
290	295	300
Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr		
305	310	315
Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg		
325	330	335
Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg		
340	345	350
Leu Pro Ser Val Val		
355		

<210> 3291

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3291

Met Gly Glu Ala Trp Phe Pro Glu Val Ala Pro Ser Leu Thr Ser Ser		
1	5	10
Leu Gly Trp Glu Trp Gly Phe Leu Trp Leu Cys Val Ala Pro Arg Gly		
20	25	30
Ala Val Ala Pro Ser Ser Phe Ser Leu Phe Ser Val Gly Arg Val Val		
35	40	45
Phe Leu Met Ser Pro Asn Ala Ser Thr Trp Ile Phe Gln Leu Lys Met		
50	55	60

Leu Tyr Ser Leu Ala Ser Phe Val Pro Leu Cys Pro Phe Gly Ala Ser
 65 70 75 80
 Leu Leu Glu Phe Ala Gly Gly Pro Leu Leu Thr Leu Phe Ala Trp Val
 85 90 95
 Ser Pro Ala Glu Ala Ala Lys Gln Gln Arg Leu Leu Pro Val Leu Ser
 100 105 110
 Ser Arg Ser Phe Asp Pro Val Gly His Leu Ser Asp Ala Ser Gln Ser
 115 120 125
 Ser Pro Val Ser Gly Val Cys Arg Ser Lys Leu Glu Gly Ile Ser Gln
 130 135 140
 Ser Val Tyr Met Gly Ile Arg Asp Pro Leu Glu Glu Ala Asp
 145 150 155

<210> 3292

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3292

Met Glu Met Ile Ala Phe Ala Arg Ile Phe Cys Lys Gly Gln Val Ser
 1 5 10 15
 Thr Ala Thr Phe Leu Glu Ser Cys Gly Val Ala Asp Leu Ile Thr Thr
 20 25 30
 Cys Tyr Gly Gly Arg Asn Arg Arg Val Ala Glu Ala Phe Ala Arg Thr
 35 40 45
 Gly Lys Thr Ile Glu Glu Leu Glu Lys Glu Met Leu Asn Gly Gln Lys
 50 55 60
 Leu Gln Gly Pro Gln Thr Ser Ala Glu Val Tyr Arg Ile Leu Lys Gln

65	70	75	80
Lys Gly Leu Leu Asp Lys Phe Pro Leu Phe Thr Ala Val Tyr Gln Ile			
85	90	95	
Cys Tyr Glu Ser Arg Pro Val Gln Glu Met Leu Ser Cys Leu Gln Ser			
100	105	110	
His Pro Glu His Thr			
115			

<210> 3293

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3293

Met Trp Ser Lys Gly Trp Ile Val Ile Ser Lys Glu Ile His Cys Leu			
1	5	10	15

Ile His Phe Lys Lys Gly Leu Thr Ser Gln Leu His Gly Met Arg Ser			
20	25	30	

Ala Ala Ser Asn Cys Gln Leu Leu Gln Ser Leu Leu Gln Leu Gln Lys			
35	40	45	

Asp Thr Val Leu Glu Val Ile Pro Phe Pro Cys Leu Val Thr Glu Val			
50	55	60	

Gln Leu Asn Val Ala Ala Lys Val Thr Leu Met Pro Met Gly Ser Lys			
65	70	75	80

Lys Ser Lys Ser Leu Asn Arg Ile Leu Arg Asn Pro Lys Ser Val Phe			
85	90	95	

Phe Gln His Met Thr Phe Trp Ser Ser Leu Leu Phe Ser Asn Arg			
100	105	110	

<210> 3294

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3294

Met Gly Cys Ser Pro Leu Ala Cys Ser Ser Thr Pro Leu His Pro Ser

1 5 10 15

Leu Ser Phe Gly Arg Ser Ala Ile Gln Ser Cys His Leu Phe Arg Met

20 25 30

Thr Phe Pro Phe Arg Ala Arg Cys Val Arg Phe Pro Gly Met Phe Pro

35 40 45

Ser Ser Pro Ser Ser Trp Pro Gly Pro Ala Cys His Leu His Ala

50 55 60

Gly Val Cys Asp Cys Leu Val Leu Thr Arg Gly Val Gly Trp Trp Ser

65 70 75 80

Thr Ser Leu Gly Arg Gly Leu Ile Arg Pro Gly Val Ser Arg Phe His

85 90 95

Ala Leu Ser Ile Pro Asp His

100

<210> 3295

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3295

Met Val Tyr Ser Arg His Pro Lys Pro Val Ser Thr Ser His Lys Arg
 1 5 10 15
 His Val Ser His Arg Ala Gly Asn Pro Gly Pro Ser Pro Gly Thr Ser
 20 25 30
 Gly Pro Ile Ser Ala Pro Asp Leu Pro Cys Ser Leu Ala Trp Asp Leu
 35 40 45
 Ser Tyr Ser Trp Ala Val Asp His Val Pro Leu Pro Ala Leu Thr Cys
 50 55 60
 Pro Leu Thr Gly Asp Ser Glu Gly Pro His Leu Pro Arg Cys His Ser
 65 70 75 80
 Thr Trp His Leu Met Arg Lys Ala Thr Gln Arg Lys Gly Leu Tyr Ser
 85 90 95
 Ser Asp Phe Arg Gly Lys Thr Thr Gln Met Lys Gly Thr Thr Ile
 100 105 110

<210> 3296

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3296

Met Gly Val Ala Arg Met Gly Ser His Gly Ser Val Arg Ala Glu Ala
 1 5 10 15
 Arg Phe Glu Leu Arg Pro Thr Pro Arg His Ser Ala Cys Tyr Pro Gly
 20 25 30
 Cys Pro Pro Pro Gly Cys His His Ala Arg Gly Ala Ala Ser Pro
 35 40 45

Gly Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Gly Thr
 50 55 60
 Glu Ser His Arg Leu Arg Phe Gln Arg Arg Asn Leu Val Ser Glu Asn
 65 70 75 80
 Pro Ala Leu Arg Arg Ala Gly Ala Glu Arg Ser Arg His Trp Pro Glu
 85 90 95
 Gly Gly Leu Ser Thr Tyr Lys Pro Thr Glu Ala Ser Val Ser Val Val
 100 105 110
 Leu Phe Val Val Ser Gln Ala Leu Gly Ser Trp Leu Gly Val Arg Val
 115 120 125
 Arg Ser Ser Thr Cys Lys Gln Gly Cys Leu Pro Leu Ser Thr Leu Ala
 130 135 140

<210> 3297

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3297

Met Thr Leu Ala Ser His Pro Arg Pro Glu Gly Leu His Ser Arg Gln
 1 5 10 15
 Trp Ser Gly Ser Gln Asp Ser Gln Met Gly Phe Pro Arg Ala Asp Pro
 20 25 30
 Ala Ser Asp Arg Ala Ser Leu Phe Val Ala Arg Thr Arg Arg Ser Asn
 35 40 45
 Ser Ser Glu Ala Leu Leu Val Asp Arg Ala Ala Gly Gly Gly Ala Gly
 50 55 60
 Ser Pro Pro Ala Pro Leu Ala Pro Ser Ala Ser Gly Pro Pro Val Cys

65	70	75	80
Lys Ser Ser Glu Val Leu Tyr Glu Arg Pro Gln Pro Thr Pro Ala Phe			
85	90	95	
Ser Ser Arg Thr Ala Gly Pro Pro Asp Pro Pro Arg Ala Ala Arg Pro			
100	105	110	
Ser Ser Ala Ala Pro Ala Ser Arg Gly Ala Pro Arg Leu Pro Pro Val			
115	120	125	
Cys Gly Asp Phe Leu Leu Asp Tyr Ser Leu Asp Arg Gly Leu Pro Arg			
130	135	140	
Ser Gly Gly Gly Thr Gly Trp Gly Glu Leu Pro Pro Ala Ala Glu Val			
145	150	155	160
Pro Gly Pro Leu Ser Arg Arg Asp Gly Leu Leu Thr Met Leu Pro Gly			
165	170	175	
Pro Pro Pro Val Tyr Ala Ala Asp Ser Asn Ser Pro Leu Leu Arg Thr			
180	185	190	
Lys Asp Pro His Thr Arg Ala Thr Arg Thr Lys Pro Cys Gly Leu Pro			
195	200	205	
Pro Glu Ala Ala Glu Gly Pro Glu Val His Pro Asn Pro Leu Leu Trp			
210	215	220	
Met Pro Pro Pro Thr Arg Ile Pro Ser Ala Gly Glu Arg Ser Gly His			
225	230	235	240
Lys Asn Leu Ala Leu Glu Gly Leu Arg Asp Trp Tyr Ile Arg Asn Ser			
245	250	255	
Gly Leu Ala Ala Gly Pro Gln Arg Arg Pro Val Leu Pro Ser Val Gly			
260	265	270	
Pro Pro His Pro Pro Phe Leu His Ala Arg Cys Tyr Glu Val Gly Gln			
275	280	285	
Ala Leu Tyr Gly Ala Pro Ser Gln Ala Pro Leu Pro His Ser Arg Ser			
290	295	300	

Phe Thr Ala Pro Pro Val Ser Gly Arg Tyr Gly Gly Cys Phe Tyr

305 310 315

<210> 3298

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3298

Met Ile Val Glu His Leu Ser Glu Pro Lys Ser Leu Gly Glu Cys Gly

1 5 10 15

Asp Phe Leu Glu Gly Gly Cys Arg Leu Pro Glu Ser Pro Pro Asn Gly

20 25 30

Arg Ala Glu Lys Gly Glu Gly Gly Cys Ser Gln Glu Gly Ala

35 40 45

Arg Glu Glu Gln Gly Leu Gly Ala Ser Arg Asn Met Pro Ala Val Gly

50 55 60

Gly Arg Gly Arg Gly Ala Thr Val Asn Gly Phe Pro Ser Glu Val Val

65 70 75 80

Gly Ala Asp Gly Ser Phe Cys Leu Leu Ala Leu Lys Arg Val Phe Cys

85 90 95

Gln Gly His Ser Leu Phe Leu Leu Arg Lys His Pro Pro Asn Ala Asn

100 105 110

Asn Ile Pro Thr Ser Cys

115

<210> 3299

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3299

Met	Arg	Arg	Gly	Ala	Pro	Arg	Pro	Gly	Pro	Pro	Thr	Pro	Ala	Leu	Pro
1				5				10					15		
Gly	Pro	Pro	Leu	Trp	Ala	Ser	Val	Ser	Ile	Pro	Ala	Pro	Gly	Lys	Gly
							20		25				30		
Gly	Arg	Leu	Glu	Ser	Arg	Ser	Arg	Ala	Arg	Ser	Pro	Gly	Val	Pro	Ala
							35		40			45			
Ala	Ala	Glu	Cys	Lys	Val	Ala	Ala	Phe	Ser	Leu	Leu	Arg	Gly	Ile	Ser
					50			55			60				
Glu	Ile	Ser	Gln	Glu	Gly	Thr	Phe	Gly	Arg	Phe	Trp	Gly	Gln	Leu	Gly
					65		70		75			80			
Ser	Asn	Arg	Gly	Ser	Arg	Thr	Pro	Lys	Gly	Glu	Ser	Pro	Ala	Ser	Glu
					85			90			95				
Asp	Gly	Glu	Glu	Gly	Gly	Ala	Leu	Ala	Lys	Gly	Ala	Leu	Pro	Tyr	Gln
					100			105			110				
Pro	Gly	Leu	Leu	Lys	Arg	Gly	Asp	Phe	Glu	Trp	Val	Thr	Ser	Pro	Ala
					115			120			125				
Trp	Ala	Arg	Ser	Val	Glu	Gly	Gly	Pro	Ala	Gln	Arg	Val	Asn	Arg	Leu
					130			135			140				
Glu	Val	Cys	Asp	Gln	Gly	Gln	Pro	Ala	Val	Arg	Ala	Cys	Gly	Arg	
					145			150			155				

<210> 3300

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3300

Met Gly Asp Arg Ser Gly Gln Gln Glu Arg Ser Val Pro His Ser Pro
1 5 10 15
Gly Ala Pro Val Gly Thr Ser Ala Ala Ala Val Asn Glu Leu Leu His
20 25 30
Asn Gly Phe His Pro Pro Pro Val Gln Pro Pro His Val Cys Ser Arg
35 40 45
Gly Pro Val Gly Gly Ser Asp Ala Ala Pro Gln Arg Leu Pro Leu Leu
50 55 60
Pro Glu Leu Gln Pro Gln Pro Leu Leu Pro Gln His Asp Ser Pro Ala
65 70 75 80
Lys Lys Cys Arg Leu Arg Arg Arg Met Asp Ser Gly Arg Lys Asn Arg
85 90 95
Pro Pro Phe Pro Trp Phe Gly Met Asp Ile Gly Gly Thr Leu Val Lys
100 105 110
Leu Val Tyr Phe Glu Pro Lys Asp Ile Thr Ala Glu Glu Gln Glu
115 120 125
Glu Val Glu Asn Leu Lys Ser Ile Arg Lys Tyr Leu Thr Ser Asn Thr
130 135 140
Ala Tyr Gly Lys Thr Gly Ile Arg Asp Val His Leu Glu Leu Lys Asn
145 150 155 160
Leu Thr Met Cys Gly Arg Lys Gly Asn Leu His Phe Ile Arg Phe Pro
165 170 175
Ser Cys Ala Met His Arg Phe Ile Gln Met Gly Ser Glu Lys Asn Phe
180 185 190
Ser Ser Leu His Thr Thr Leu Cys Ala Thr Gly Gly Ala Phe Lys

195	200	205
Phe Glu Glu Asp Phe Arg Met Ile Ala Asp Leu Gln Leu His Lys Leu		
210	215	220
Asp Glu Leu Asp Cys Leu Ile Gln Gly Leu Leu Tyr Val Asp Ser Val		
225	230	235
Gly Phe Asn Gly Lys Pro Glu Cys Tyr Tyr Phe Glu Asn Pro Thr Asn		
245	250	255
Pro Glu Leu Cys Gln Lys Pro Tyr Cys Leu Asp Asn Pro Tyr Pro		
260	265	270
Met Leu Leu Val Asn Met Gly Ser Gly Val Ser Ile Leu Ala Val Tyr		
275	280	285
Ser Lys Asp Asn Tyr Lys Arg Val Thr Gly Thr Ser Leu Gly Gly Gly		
290	295	300
Thr Phe Leu Gly Leu Cys Cys Leu Leu Thr Gly Cys Glu Thr Phe Glu		
305	310	315
Glu Ala Leu Glu Met Ala Ala Lys Gly Asp Ser Thr Asn Val Asp Lys		
325	330	335
Leu Val Lys Asp Ile Tyr Gly Asp Tyr Glu Arg Phe Gly Leu Gln		
340	345	350
Gly Ser Ala Val Ala Ser Ser Phe Gly Asn Met Met Ser Lys Glu Lys		
355	360	365
Arg Asp Ser Ile Ser Lys Glu Asp Leu Ala Arg Ala Thr Leu Val Thr		
370	375	380
Ile Thr Asn Asn Ile Gly Ser Ile Ala Arg Met Cys Ala Leu Asn Glu		
385	390	395
Asn Ile Asp Arg Val Val Phe Val Gly Asn Phe Leu Arg Ile Asn Met		
405	410	415
Val Ser Met Lys Leu Leu Ala Tyr Ala Met Asp Phe Trp Ser Lys Gly		
420	425	430

Gln Leu Lys Ala Leu Phe Leu Glu His Glu Gly Tyr Phe Gly Ala Val

435 440 445

Gly Ala Leu Leu Glu Leu Phe Lys Met Thr Asp Asp Lys

450 455 460

<210> 3301

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3301

Met Thr Val Leu His Tyr Leu Asp Ser Ala Gln Glu Ala Thr Met Met

1 5 10 15

Tyr Gln Tyr Ser Gln His Leu Asp Asp Val Thr Leu Leu Cys Leu Gly

20 25 30

Pro Val Tyr Ile Val Tyr Glu Thr Tyr Val Trp Val His His Leu Val

35 40 45

Asp Val Thr Leu Leu His Gly Leu Cys Pro Trp Arg Cys Glu Ile Phe

50 55 60

Phe His Ser Ser Pro Ala Ile Ser Leu Leu Cys Leu Phe Cys Leu Gly

65 70 75 80

Leu Ala Lys Lys Arg Ile Ile Val Tyr His Trp Thr Gln Asn Leu Gly

85 90 95

Glu Val Thr Pro Ile Leu Pro Gly Ala His Ile Phe Gly Tyr Cys Asp

100 105 110

Ile Gly Asp Gly Trp Glu Ala His Glu Trp Ala Leu Leu Thr Glu Gly

115 120 125

Leu Val Thr Ser Gln His Ser Leu Pro Arg Lys Cys Asp Tyr Cys Leu

130 135 140

Pro Phe Ala Pro Cys Leu Gln Gly Arg Leu

145 150

<210> 3302

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3302

Met Ala His Cys Ser Leu Asn Leu Leu Gly Ser Asn Lys Pro Pro Thr

1 5 10 15

Leu Ala Ser Gln Val Ala Gly Thr Ile Gly Thr His His His Val Arg

20 25 30

Pro Ile Phe Val Phe Lys Glu Thr Gly Cys His Cys Val Ala Gln

35 40 45

Ala Gly Leu Gln Leu Leu Gly Ser Ser Asn Leu Ser Ala Leu Val Ser

50 55 60

Gln Thr Ala Gly Ser Ile Val Val Asn Gln Arg Ala Gln Pro Pro Ser

65 70 75 80

Leu Ser Val Ser Val Phe Leu Cys Ser Ser Leu Ser Leu Leu Phe Leu

85 90 95

Ser Leu Pro Ile Ser Leu Ser Phe Leu Ser Val Ser Ala Ser Val Cys

100 105 110

Val Cys Phe Leu Ser Leu Phe Ser Val Cys Leu Cys Leu Pro Leu Pro

115 120 125

Val Ser Pro Leu Val Cys Ala Ser Leu Cys Leu Ser Leu Ala Leu Leu

130 135 140

Cys Leu Ser .Leu Phe Leu Gln Arg Ala Phe Pro His Val Tyr Pro Leu
 145 150 155 160
 Val Pro Pro Tyr Ser Val Leu Pro Tyr Pro Gly Ser Ser Tyr Leu Ser
 165 170 175
 Ala Phe Leu Glu Pro Gly Asp
 180

<210> 3303

<211> 650

<212> PRT

<213> Homo sapiens

<400> 3303

Met Ala Arg Ser Pro Thr Thr His Pro Pro Ala Asn Thr Tyr Leu Pro
 1 5 10 15

Gln Tyr Gly Gly Tyr Gly Ala Gly Gln Ser Val Phe Ala Pro Thr Lys
 20 25 30

Pro Phe Thr Gly Gln Asp Cys Ala Asn Ser Lys Asp Cys Ser Phe Ala
 35 40 45

Tyr Gly Ser Gly Asn Ser Leu Pro Ala Ser Pro Ser Ser Ala His Ser
 50 55 60

Ala Gly Tyr Ala Pro Pro Pro Thr Gly Gly Pro Cys Leu Pro Pro Ser
 65 70 75 80

Lys Ala Ser Phe Phe Ser Ser Ser Glu Gly Ala Pro Phe Ser Gly Ser
 85 90 95

Ala Pro Thr Pro Leu Arg Cys Asp Ser Arg Ala Ser Thr Val Ser Pro
 100 105 110

Gly Gly Tyr Met Val Pro Lys Gly Thr Thr Ala Ser Ala Thr Ser Ala

115	120	125
Ala Ser Ala Ala Ser Ser Ser Ser Ser Phe Gln Pro Ser Pro Glu		
130	135	140
Asn Cys Arg Gln Phe Ala Gly Ala Ser Gln Trp Pro Phe Arg Gln Gly		
145	150	155
Tyr Gly Gly Leu Asp Trp Ala Ser Glu Ala Phe Ser Gln Leu Tyr Asn		
165	170	175
Pro Ser Phe Asp Cys His Val Ser Glu Pro Asn Val Ile Leu Asp Ile		
180	185	190
Ser Asn Tyr Thr Pro Gln Lys Val Lys Gln Gln Thr Ala Val Ser Glu		
195	200	205
Thr Phe Ser Glu Ser Ser Asp Ser Thr Gln Phe Asn Gln Pro Val		
210	215	220
Gly Gly Gly Phe Arg Arg Ala Asn Ser Glu Ala Ser Ser Ser Glu		
225	230	235
Gly Gln Ser Ser Leu Ser Ser Leu Glu Lys Leu Met Met Asp Trp Asn		
245	250	255
Glu Ala Ser Ser Ala Pro Gly Tyr Asn Trp Asn Gln Ser Val Leu Phe		
260	265	270
Gln Ser Ser Ser Lys Pro Gly Arg Gly Arg Arg Lys Lys Val Asp Leu		
275	280	285
Phe Glu Ala Ser His Leu Gly Phe Pro Thr Ser Ala Ser Ala Ala		
290	295	300
Ser Gly Tyr Pro Ser Lys Arg Ser Thr Gly Pro Arg Gln Pro Arg Gly		
305	310	315
Gly Arg Gly Gly Gly Ala Cys Ser Ala Lys Lys Glu Arg Gly Gly Ala		
325	330	335
Ala Ala Lys Ala Lys Phe Ile Pro Lys Pro Gln Pro Val Asn Pro Leu		
340	345	350

Phe Gln Asp Ser Pro Asp Leu Gly Leu Asp Tyr Tyr Ser Gly Asp Ser
 355 360 365
 Ser Met Ser Pro Leu Pro Ser Gln Ser Arg Ala Phe Gly Val Gly Glu
 370 375 380
 Arg Asp Pro Cys Asp Phe Ile Gly Pro Tyr Ser Met Asn Pro Ser Thr
 385 390 395 400
 Pro Ser Asp Gly Thr Phe Gly Gln Gly Phe His Cys Asp Ser Pro Ser
 405 410 415
 Leu Gly Ala Pro Glu Leu Asp Gly Lys His Phe Pro Pro Leu Ala His
 420 425 430
 Pro Pro Thr Val Phe Asp Ala Gly Leu Gln Lys Ala Tyr Ser Pro Thr
 435 440 445
 Cys Ser Pro Thr Leu Gly Phe Lys Glu Glu Leu Arg Pro Pro Pro Thr
 450 455 460
 Lys Leu Ala Ala Cys Glu Pro Leu Lys His Gly Leu Gln Gly Ala Ser
 465 470 475 480
 Leu Gly His Ala Ala Ala Ala Gln Ala His Leu Ser Cys Arg Asp Leu
 485 490 495
 Pro Leu Gly Gln Pro His Tyr Asp Ser Pro Ser Cys Lys Gly Thr Ala
 500 505 510
 Tyr Trp Tyr Pro Pro Gly Ser Ala Ala Arg Ser Pro Pro Tyr Glu Gly
 515 520 525
 Lys Val Gly Thr Gly Leu Leu Ala Asp Phe Leu Gly Arg Thr Glu Ala
 530 535 540
 Ala Cys Leu Ser Ala Pro His Leu Ala Ser Pro Pro Ala Thr Pro Lys
 545 550 555 560
 Ala Asp Lys Glu Pro Leu Glu Met Ala Arg Pro Pro Gly Pro Pro Arg
 565 570 575
 Gly Pro Ala Ala Ala Ala Gly Tyr Gly Cys Pro Leu Leu Ser Asp

580	585	590
Leu Thr Leu Ser Pro Val Pro Arg Asp Ser Leu Leu Pro Leu Gln Asp		
595	600	605
Thr Ala Tyr Arg Tyr Pro Gly Phe Met Pro Gln Ala His Pro Gly Leu		
610	615	620
Gly Gly Gly Pro Lys Ser Gly Phe Leu Gly Pro Met Ala Glu Pro His		
625	630	635
Pro Glu Asp Thr Phe Thr Val Thr Ser Leu		
645	650	

<210> 3304

<211> 893

<212> PRT

<213> Homo sapiens

<400> 3304

Met Gly Arg Met Gly Lys Gly Cys Pro Ala Ser Gly Pro Arg Ser Trp

1 5 10 15

Leu Leu Ser Asp Glu Leu Val Gln Gly Ser Arg Ala Gly Val Ser Ala

20 25 30

Ser Phe Pro Val Gly Phe Arg Glu Gly Gly Gly Gly Asp Phe Arg

35 40 45

Arg Gly Asp Val Gly Leu Gln Asp Gly Gly Val Arg Val Arg Val Ile

50 55 60

Ile Phe Ala Phe Ser Leu His Ser Leu Leu Ser Arg Phe Leu Pro Gly

65 70 75 80

Gly Asp Ala Ser Leu Met Glu Leu Glu Lys Arg Lys Glu Asn Arg Phe

85 90 95

Val Glu Arg Gln Ser Ile Val Pro Leu Arg Leu Ile Tyr Arg Ser Gly
 100 105 110
 Gly Glu Asp Glu Ser Arg His Asp Ala Leu Asp Thr Arg Val Arg Gly
 115 120 125
 Asp Leu Gly Gly Arg Gln Leu Thr His Val Asp Gln Ala Ser Phe Gln
 130 135 140
 Val Asp Ala Phe Gly Thr Ser Phe Ile Leu Asp Val Val Leu Asn His
 145 150 155 160
 Asp Leu Leu Ser Ser Glu Tyr Ile Glu Arg His Ile Glu His Gly Gly
 165 170 175
 Lys Thr Val Glu Val Lys Gly Gly Glu His Cys Tyr Tyr Gln Gly His
 180 185 190
 Ile Arg Gly Asn Pro Asp Ser Phe Val Ala Leu Ser Thr Cys His Gly
 195 200 205
 Leu His Gly Met Phe Tyr Asp Gly Asn His Thr Tyr Leu Ile Glu Pro
 210 215 220
 Glu Glu Asn Asp Thr Thr Gln Glu Asp Phe His Phe His Ser Val Tyr
 225 230 235 240
 Lys Ser Arg Leu Phe Glu Phe Ser Leu Asp Asp Leu Pro Ser Glu Phe
 245 250 255
 Gln Gln Val Asn Ile Thr Pro Ser Lys Phe Ile Leu Lys Pro Arg Pro
 260 265 270
 Lys Arg Ser Lys Arg Gln Leu Arg Arg Tyr Pro Arg Asn Val Glu Glu
 275 280 285
 Glu Thr Lys Tyr Ile Glu Leu Met Ile Val Asn Asp His Leu Met Phe
 290 295 300
 Lys Lys His Arg Leu Ser Val Val His Thr Asn Thr Tyr Ala Lys Ser
 305 310 315 320
 Val Val Asn Met Ala Asp Leu Ile Tyr Lys Asp Gln Leu Lys Thr Arg

	325	330	335	
Ile Val Leu Val Ala Met Glu Thr Trp Ala Thr Asp Asn Lys Phe Ala				
	340	345	350	
Ile Ser Glu Asn Pro Leu Ile Thr Leu Arg Glu Phe Met Lys Tyr Arg				
	355	360	365	
Arg Asp Phe Ile Lys Glu Lys Ser Asp Ala Val His Leu Phe Ser Gly				
	370	375	380	
Ser Gln Phe Glu Ser Ser Arg Ser Gly Ala Ala Tyr Ile Gly Gly Ile				
	385	390	395	400
Cys Ser Leu Leu Lys Gly Gly Val Asn Glu Phe Gly Lys Thr Asp				
	405	410	415	
Leu Met Ala Val Thr Leu Ala Gln Ser Leu Ala His Asn Ile Gly Ile				
	420	425	430	
Ile Ser Asp Lys Arg Lys Leu Ala Ser Gly Glu Cys Lys Cys Glu Asp				
	435	440	445	
Thr Trp Ser Gly Cys Ile Met Gly Asp Thr Gly Tyr Tyr Leu Pro Lys				
	450	455	460	
Lys Phe Thr Gln Cys Asn Ile Glu Glu Tyr His Asp Phe Leu Asn Ser				
	465	470	475	480
Gly Gly Gly Ala Cys Leu Phe Asn Lys Pro Ser Lys Leu Leu Asp Pro				
	485	490	495	
Pro Glu Cys Gly Asn Gly Phe Ile Glu Thr Gly Glu Glu Cys Asp Cys				
	500	505	510	
Gly Thr Pro Ala Glu Cys Val Leu Glu Gly Ala Glu Cys Cys Lys Lys				
	515	520	525	
Cys Thr Leu Thr Gln Asp Ser Gln Cys Ser Asp Gly Leu Cys Cys Lys				
	530	535	540	
Lys Cys Lys Phe Gln Pro Met Gly Thr Val Cys Arg Glu Ala Val Asn				
	545	550	555	560

Asp Cys Asp Ile Arg Glu Thr Cys Ser Gly Asn Ser Ser Gln Cys Ala
 565 570 575
 Pro Asn Ile His Lys Met Asp Gly Tyr Ser Cys Asp Gly Val Gln Gly
 580 585 590
 Ile Cys Phe Gly Gly Arg Cys Lys Thr Arg Asp Arg Gln Cys Lys Tyr
 595 600 605
 Ile Trp Gly Gln Lys Val Thr Ala Ser Asp Lys Tyr Cys Tyr Glu Lys
 610 615 620
 Leu Asn Ile Glu Gly Thr Glu Lys Gly Asn Cys Gly Lys Asp Lys Asp
 625 630 635 640
 Thr Trp Ile Gln Cys Asn Lys Arg Asp Val Leu Cys Gly Tyr Leu Leu
 645 650 655
 Cys Thr Asn Ile Gly Asn Ile Pro Arg Leu Gly Glu Leu Asp Gly Glu
 660 665 670
 Ile Thr Ser Thr Leu Val Val Gln Gln Gly Arg Thr Leu Asn Cys Ser
 675 680 685
 Gly Gly His Val Lys Leu Glu Glu Asp Val Asp Leu Gly Tyr Val Glu
 690 695 700
 Asp Gly Thr Pro Cys Gly Pro Gln Met Met Cys Leu Glu His Arg Cys
 705 710 715 720
 Leu Pro Val Ala Ser Phe Asn Phe Ser Thr Cys Leu Ser Ser Lys Glu
 725 730 735
 Gly Thr Ile Cys Ser Gly Asn Gly Val Cys Ser Asn Glu Leu Lys Cys
 740 745 750
 Val Cys Asn Arg His Trp Ile Gly Ser Asp Cys Asn Thr Tyr Phe Pro
 755 760 765
 His Asn Asp Asp Ala Lys Thr Gly Ile Thr Leu Ser Gly Asn Gly Val
 770 775 780
 Ala Gly Thr Asn Ile Ile Ile Gly Ile Ile Ala Gly Thr Ile Leu Val

785	790	795	800
Leu Ala Leu Ile Leu Gly Ile Thr Ala Trp Gly Tyr Lys Asn Tyr Arg			
805	810	815	
Glu Gln Arg Gln Leu Pro Gln Gly Asp Tyr Val Lys Lys Pro Gly Gly			
820	825	830	
Gly Asp Ser Phe Tyr Ser Asp Ile Pro Pro Gly Val Ser Thr Asn Ser			
835	840	845	
Ala Ser Ser Ser Lys Lys Arg Ser Asn Gly Leu Ser His Ser Trp Ser			
850	855	860	
Glu Arg Ile Pro Asp Thr Lys His Ile Ser Asp Ile Cys Glu Asn Gly			
865	870	875	880
Arg Pro Arg Ser Asn Ser Trp Gln Gly Asn Leu Gly Gly			
885	890		

<210> 3305

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3305

Met Phe Leu Gln Pro Ser Thr Pro Ser Ser Phe Ala Ser His Pro Ser			
1	5	10	15
Leu Leu Leu His Leu Phe Ser Tyr Ile His Tyr Gly Phe Pro Phe Phe			
20	25	30	
Gln Lys Ser Thr Ser Ser Leu Thr Phe Gly Asp Gly Gly Arg Val Pro			
35	40	45	
Gln Ile Val Pro Asp Leu Ala Ser Glu Ser Pro Phe Glu Cys Leu Leu			
50	55	60	

Tyr Pro Ser Ile Phe Gly Ser Thr Pro Leu Ile Ser Asp Leu Thr Arg
 65 70 75 80
 Cys Ser Gly Pro Leu Gly Thr Ser His Gly Ser Val Phe Val Pro Gly
 85 90 95
 Ala Leu Val Pro Gly Thr Arg Cys Ala Tyr Cys Ser Trp Gly Val Phe
 100 105 110
 Ala Ser Cys Pro Ile Asp Asp
 115

<210> 3306

<211> 208

<212> PRT

<213> Homo sapiens

<400> 3306

Met Ser His Pro Ala Trp Thr Pro Cys Arg Ala Ser Pro Lys Arg Gln
 1 5 10 15
 Trp Thr Gln Ala Gly Ser Ser Thr Cys Thr Pro Ala Leu Arg His Ala
 20 25 30
 Phe Ser Leu Asp Val Ala Ser Ala Trp Val Leu Pro Leu Arg Thr Ser
 35 40 45
 Arg Gly Ala Gly Gly Ala Ala Cys Cys His Pro His Trp Gly His Lys
 50 55 60
 Thr Ser Ala Val Glu Gly Ala Gln Ser Gln Leu His Pro Gly Pro Ser
 65 70 75 80
 Thr Ala Pro Arg Cys Gln Val Leu Leu Pro His Ser Pro Gly Pro Trp
 85 90 95
 Pro Ala Gly Ala Gly Ala Thr Pro Ala Trp Gly Pro Ala Glu Gly Gly

100	105	110
Trp Ala Ser Ser Gln Asp Pro Gln His Leu Leu Leu Glu Arg Gly Gly		
115	120	125
Arg Ala Ser Asp Pro Val Pro Ala Arg Trp Glu Gln Asp Thr Asp Gly		
130	135	140
Phe Val Leu Met Ala Asn Ala Ser Glu Met Asp Arg Gln Ser His Pro		
145	150	155
Val Ala Phe Thr Val Thr Ile Leu Pro Val Asn Gly Gln Pro Pro Thr		
165	170	175
Ser Tyr Lys Leu Arg Pro Ala Gly Ala Leu Asp Gly Gly Ile His Phe		
180	185	190
Gly Leu Ser Asp Gly Glu His Thr Ser Ser Arg His Leu Ser Ser Glu		
195	200	205

<210> 3307

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3307

Met Leu Thr Leu His Gly Ala Ser Ser Arg Phe Pro Gly Lys Ser Gly			
1	5	10	15
Ser Arg Arg Ser Ser Leu Ile Ser Gln Pro Leu Trp Arg Arg Glu Tyr			
20	25	30	
Gln Lys Gln Asp Glu Ser Gln Val Lys Ser Leu Ser Leu Gly Ser Pro			
35	40	45	
Lys Gly Gln Val Leu Thr Ser Gln Arg Pro Gly Pro Ala Gly Pro His			
50	55	60	

Gly Ser Thr Thr Pro Ser Arg Cys Pro Arg Pro Phe Val Ser His Pro
 65 70 75 80
 Ala Phe Ser Arg Ile Ser Lys Asp Ala Arg Leu Asp Pro Gln Ser Trp
 85 90 95
 Lys Thr Ala Val Pro Gly Ser His Gln Asn Gly Glu Ala Ser Ser Ser
 100 105 110
 His

<210> 3308

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3308

Met Lys Leu Arg Cys Tyr Leu Lys Leu Thr Ala Pro Asn Arg Pro Asp
 1 5 10 15

Ser Gln Cys Pro Pro Arg Thr Ser Val Pro Ala Asp Leu Ala Ser Gly
 20 25 30

Val Thr Ser Gly Glu Pro Phe Lys Ser Pro His Leu Ala Ser His Ser
 35 40 45

Trp Pro Thr Leu Cys Ser Arg Ala Asn Gln Val Ala Asn Asp Lys Arg
 50 55 60

Leu Ser Trp Pro Asn Ser Ser Leu Ala Trp Ile Thr Pro Ile Arg Cys
 65 70 75 80

Gln Arg Cys Leu Leu Arg Trp Lys Asn Gln Ser Gly Ser Gly Val Arg
 85 90 95

His Gln Gly Lys Gln Ala Asp Leu Glu Glu Ile Lys Tyr Ala Cys Ser

100 105 110

Leu Pro Ile Gln Val

115

<210> 3309

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3309

Met Val Pro Arg Pro Leu Gln Thr Arg Val Pro Gly Cys Phe Ser Lys

1 5 10 15

Gly Cys Glu Gly Thr Gly Gln Arg Gly Trp Val Trp Gly Arg Glu His

20 25 30

Ile Asp Val Gly Ala His Ser Val Gly Thr Gly Arg Gln Leu Leu Cys

35 40 45

Gln Ala Phe Ile Phe Pro Ile Leu Tyr Met Arg Lys Leu Gly Ser Gly

50 55 60

Gly Glu Gly Cys Leu Ala Asp Val Trp Pro Gly Gly Gly Pro Gly

65 70 75 80

Leu Glu Pro Gln Ala Pro Pro Ser Ser Cys Lys Ser Pro Ala Gln Arg

85 90 95

Arg Gly Gly Ser Trp Gly Leu Ser Ser Leu Gln Asp Arg Val His Leu

100 105 110

Ser Ser Ser Ile Ile His Ser Phe Ile His Ser Phe Asn Lys Cys Leu

115 120 125

Ala Ser Gly

130

<210> 3310

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3310

Met Leu Ala Glu Trp Gly Ala Cys Leu Leu Leu Ala Val Ala Leu Leu

1

5

10

15

Gly Pro Gly Leu Gln Ala Gln Ala Met Glu Gly Val Lys Cys Gly Gly

20

25

30

Val Leu Ser Ala Pro Ser Gly Asn Phe Ser Ser Pro Asn Phe Pro Arg

35

40

45

Leu Tyr Pro Tyr Asn Thr Glu Cys Ser Trp Leu Ile Val Val Ala Glu

50

55

60

Gly Ser Ser Val Leu Leu Thr Phe His Ala Phe Asp Leu Glu Tyr His

65

70

75

80

Asp Thr Cys Ser Phe Asp Phe Leu Glu Ile Tyr Asn Gly Ala Ser Pro

85

90

95

Asp Lys Gly Asn Leu Leu Gly Arg Phe Cys Gly Lys Val Pro Pro Pro

100

105

110

Pro Phe Thr Ser Ser Trp His Val Met Ser Val Ile Phe His Ser Asp

115

120

125

Lys His Val Ala Ser His Gly Phe Ser Ala Gly Tyr Gln Lys Gly Gln

130

135

140

Arg Gly Ala Leu Gly Thr Cys Cys Ser Gly Ser His Leu

145

150

155

<210> 3311

<211> 630

<212> PRT

<213> Homo sapiens

<400> 3311

Met Lys Ile Gly Gln Gly Lys Tyr Glu Pro Gly Phe Phe Pro Lys Leu

1 5 10 15

Gln Ser Asp Val Leu Ser Thr Gly Pro Ala Ser Asn Lys Trp Thr Lys

20 25 30

Arg Asn Ala Pro Ala Gln Trp Arg Arg Lys Asp Arg Gln Lys Gln His

35 40 45

Thr Glu His Leu Arg Leu Asp Asn Asp Gln Arg Glu Lys Tyr Ile Gln

50 55 60

Glu Ala Arg Thr Met Gly Ser Thr Ile Arg Gln Pro Lys Leu Ser Asn

65 70 75 80

Leu Ser Pro Ser Val Ile Ala Gln Thr Asn Trp Lys Phe Val Glu Gly

85 90 95

Leu Leu Lys Glu Cys Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys

100 105 110

Met Gly Arg Glu Ala Val Glu Leu Gly His Gly Glu Val Asn Ile Thr

115 120 125

Gly Val Glu Glu Asn Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu

130 135 140

Arg Ile Trp Ser His Gly Leu Gln Val Lys Gln Gly Lys Ser Ala Leu

145 150 155 160

Trp Ser His Leu Leu His Tyr Gln Asp Asn Arg Gln Arg Lys Leu Thr

165 170 175

Ser Gly Ser Leu Ser Thr Ser Gly Ile Leu Leu Asp Ser Glu Arg Arg
 180 185 190
 Lys Ser Asp Ala Ser Ser Leu Met Pro Pro Leu Arg Ile Ser Leu Ile
 195 200 205
 Gln Asp Met Arg His Ile Gln Asn Ile Gly Glu Ile Lys Thr Asp Val
 210 215 220
 Gly Lys Ala Arg Ala Trp Val Arg Leu Ser Met Glu Lys Lys Leu Leu
 225 230 235 240
 Ser Arg His Leu Lys Gln Leu Leu Ser Asp His Glu Leu Thr Lys Lys
 245 250 255
 Leu Tyr Lys Arg Tyr Ala Phe Leu Arg Cys Asp Asp Glu Lys Glu Gln
 260 265 270
 Phe Leu Tyr His Leu Leu Ser Phe Asn Ala Val Asp Tyr Phe Cys Phe
 275 280 285
 Thr Asn Val Phe Thr Thr Ile Leu Ile Pro Tyr His Ile Leu Ile Val
 290 295 300
 Pro Ser Lys Lys Leu Gly Gly Ser Met Phe Thr Ala Asn Pro Trp Ile
 305 310 315 320
 Cys Ile Ser Gly Glu Leu Gly Glu Thr Gln Ile Met Gln Ile Pro Arg
 325 330 335
 Asn Val Leu Glu Met Thr Phe Glu Cys Gln Asn Leu Gly Lys Leu Thr
 340 345 350
 Thr Val Gln Ile Gly His Asp Asn Ser Gly Leu Tyr Ala Lys Trp Leu
 355 360 365
 Val Glu Tyr Val Met Val Arg Asn Glu Ile Thr Gly His Thr Tyr Lys
 370 375 380
 Phe Pro Cys Gly Arg Trp Leu Gly Lys Gly Met Asp Asp Gly Ser Leu
 385 390 395 400
 Glu Arg Ile Leu Val Gly Glu Leu Leu Thr Ser Gln Pro Glu Val Asp

405	410	415
Glu Arg Pro Cys Arg Thr Pro Pro Leu Gln Gln Ser Pro Ser Val Ile		
420	425	430
Arg Arg Leu Val Thr Ile Ser Pro Asn Asn Lys Pro Lys Leu Asn Thr		
435	440	445
Gly Gln Ile Gln Glu Ser Ile Gly Glu Ala Val Asn Gly Ile Val Lys		
450	455	460
His Phe His Lys Pro Glu Lys Glu Arg Gly Ser Leu Thr Leu Leu		
465	470	475
Cys Gly Glu Cys Gly Leu Val Ser Ala Leu Glu Gln Ala Phe Gln His		
485	490	495
Gly Phe Lys Ser Pro Arg Leu Phe Lys Asn Val Phe Ile Trp Asp Phe		
500	505	510
Leu Glu Lys Ala Gln Thr Tyr Tyr Glu Thr Leu Glu Lys Asn Glu Val		
515	520	525
Val Pro Glu Glu Asn Trp His Thr Arg Ala Arg Asn Phe Cys Arg Phe		
530	535	540
Val Thr Ala Ile Asn Asn Thr Pro Arg Asn Ile Gly Lys Asp Gly Lys		
545	550	555
Phe Gln Met Leu Val Cys Leu Gly Ala Arg Asp His Leu Leu His His		
565	570	575
Trp Ile Ala Leu Leu Ala Asp Cys Pro Ile Thr Ala His Met Tyr Glu		
580	585	590
Asp Val Ala Leu Ile Lys Asp His Thr Leu Val Asn Ser Leu Ile Arg		
595	600	605
Val Leu Gln Thr Leu Gln Glu Phe Asn Ile Thr Leu Glu Thr Ser Leu		
610	615	620
Val Lys Gly Ile Asp Ile		
625	630	

<210> 3312

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3312

Met Ser Arg Leu Ala Gly Gly Gln Ala Pro Tyr Leu Trp Glu Gln Gly

1 5 10 15

Phe Ala Gln Pro Pro Trp Asp Ala Leu Gly Leu Leu Thr Ala Gln Asp

20 25 30

Pro Ser Arg Glu Ala Ala Trp Ile Gly Gly Ser Gly Leu Thr Ala Gly

35 40 45

Leu Gly Leu Glu Pro Ser Pro Cys Pro Ala Gln Ala Pro Ala Glu Pro

50 55 60

Gly Ala Leu Ala Glu Ala Gly Leu Gly Ser Gly Ala Ala Arg Arg Pro

65 70 75 80

Pro Ile Ser His Ser Leu Gly Val Leu Arg Val Thr Gln Arg Thr Val

85 90 95

Lys Cys Trp Ile

100

<210> 3313

<211> 635

<212> PRT

<213> Homo sapiens

<400> 3313

Met Ser Thr Cys Cys Trp Cys Thr Pro Gly Gly Ala Ser Thr Ile Asp
 1 5 10 15
 Phe Leu Lys Arg Tyr Ala Ser Asn Thr Pro Ser Gly Glu Phe Gln Thr
 20 25 30
 Ala Asp Glu Asp Leu Cys Tyr Cys Leu Glu Cys Val Ala Glu Tyr His
 35 40 45
 Lys Ala Arg Asp Glu Leu Pro Phe Leu His Glu Val Leu Trp Glu Leu
 50 55 60
 Glu Thr Leu Arg Leu Ile Asn His Phe Glu Lys Ser Met Lys Ala Glu
 65 70 75 80
 Ile Gly Asp Asp Asp Glu Leu Tyr Ile Val Asp Asn Asn Gly Glu Met
 85 90 95
 Pro Leu Phe Asp Ile Thr Gly Gln Asp Phe Glu Asn Lys Leu Arg Val
 100 105 110
 Pro Leu Leu Glu Ile Leu Lys Tyr Pro Tyr Leu Leu Leu His Glu Arg
 115 120 125
 Val Asn Glu Leu Cys Val Glu Ala Leu Cys Arg Met Glu Gln Ala Asn
 130 135 140
 Cys Ser Phe Gln Val Phe Asp Lys His Pro Gly Ile Tyr Leu Phe Leu
 145 150 155 160
 Val His Pro Asn Glu Met Val Arg Arg Trp Ala Ile Leu Thr Ala Arg
 165 170 175
 Asn Leu Gly Lys Val Asp Arg Asp Asp Tyr Tyr Asp Leu Gln Glu Val
 180 185 190
 Leu Leu Cys Leu Phe Lys Val Ile Glu Leu Gly Leu Leu Glu Ser Pro
 195 200 205
 Asp Ile Tyr Thr Ser Ser Val Leu Glu Lys Gly Lys Leu Ile Leu Leu
 210 215 220

Pro Ser His Met Tyr Asp Thr Thr Asn Tyr Lys Ser Tyr Trp Leu Gly
 225 230 235 240
 Ile Cys Met Leu Leu Thr Ile Leu Glu Glu Gln Ala Met Asp Ser Leu
 245 250 255
 Leu Leu Gly Ser Asp Lys Gln Asn Asp Phe Met Gln Ser Ile Leu His
 260 265 270
 Thr Met Glu Arg Glu Ala Asp Asp Ser Val Asp Pro Phe Trp Pro
 275 280 285
 Ala Leu His Cys Phe Met Val Ile Leu Asp Arg Leu Gly Ser Lys Val
 290 295 300
 Trp Gly Gln Leu Met Asp Pro Ile Val Ala Phe Gln Thr Ile Ile Asn
 305 310 315 320
 Asn Ala Ser Tyr Asn Arg Gly Ile Arg His Ile Arg Asn Ser Ser Val
 325 330 335
 Arg Thr Lys Leu Glu Pro Glu Ser Tyr Leu Asp Asp Met Val Thr Cys
 340 345 350
 Ser Gln Ile Val Tyr Asn Tyr Asn Pro Glu Lys Thr Lys Asp Ser
 355 360 365
 Gly Trp Arg Thr Ala Ile Cys Pro Asp Tyr Cys Pro Asn Met Tyr Glu
 370 375 380
 Glu Met Glu Thr Leu Ala Ser Val Leu Gln Ser Asp Ile Gly Gln Asp
 385 390 395 400
 Met Arg Val His Asn Ser Thr Phe Leu Arg Phe Ile Pro Phe Val Gln
 405 410 415
 Ser Leu Met Asp Leu Lys Asp Leu Gly Val Ala Tyr Ile Ala Gln Val
 420 425 430
 Val Asn His Leu Tyr Ser Glu Val Lys Glu Val Leu Asn Gln Thr Asp
 435 440 445
 Ala Val Cys Asp Lys Val Thr Glu Phe Phe Leu Leu Ile Leu Val Ser

450	455	460
Val Ile Glu Leu His Arg Asn Lys Lys Cys Leu His Leu Leu Trp Val		
465	470	475
Ser Ser Gln Gln Trp Val Glu Ala Val Val Lys Cys Ala Lys Leu Pro		480
485	490	495
Thr Thr Ala Phe Thr Arg Ser Ser Glu Lys Ser Ser Gly Asn Cys Ser		
500	505	510
Lys Gly Thr Ala Met Ile Ser Ser Leu Ser Leu His Ser Met Pro Ser		
515	520	525
Asn Ser Val Gln Leu Ala Tyr Val Gln Leu Ile Arg Ser Leu Leu Lys		
530	535	540
Glu Gly Tyr Gln Leu Gly Gln Gln Ser Leu Cys Lys Arg Phe Trp Asp		
545	550	555
Lys Leu Asn Leu Phe Leu Arg Gly Asn Leu Ser Leu Gly Trp Gln Leu		560
565	570	575
Thr Ser Gln Glu Thr His Glu Leu Gln Ser Cys Leu Lys Gln Ile Ile		
580	585	590
Arg Asn Ile Lys Phe Lys Ala Pro Pro Cys Asn Thr Phe Val Asp Leu		
595	600	605
Thr Ser Ala Cys Lys Ile Ser Pro Ala Ser Tyr Asn Lys Glu Glu Ser		
610	615	620
Ser Leu Ser Ser Phe Asn Ile Ser Tyr Phe Lys		
625	630	635

<210> 3314

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3314

Met Gln Gly Lys Cys Phe Ser Arg Thr Ser Leu Leu Ser Lys Gly Thr
 1 5 10 15
 Gln Gln Ser Gly Cys Thr Leu Cys Asp Leu Pro Ser Gln His Val Pro
 20 25 30
 Pro Leu Ser Pro Arg Arg Glu Arg Gln Glu Arg Val Phe Thr Val Ser
 35 40 45
 Val Ser Leu Ser His Gln Ala Gly Val Gln Trp Pro Asp Leu Gly Ser
 50 55 60
 Leu His Pro Leu Thr Pro Trp Phe Lys Gln Phe Ser Cys Leu Ser Leu
 65 70 75 80
 Pro Arg Ser Trp Asp Ser Arg His Ala Pro Pro Leu Pro Ala Asn Phe
 85 90 95
 Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser
 100 105 110
 Leu Ser

<210> 3315

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3315

Met Val Leu Asp Lys Arg Ala Gly Lys Lys Arg Ala Ala Arg Gly Gly
 1 5 10 15
 Phe Cys Pro Arg Arg Pro Gln Ala Gly Gly Pro His Gly Leu Cys Pro

20	25	30
Asp Val Leu Leu Leu His Pro Ala Ala Pro Thr Thr Glu Thr Ala Pro		
35	40	45
Gly Glu Gly Thr Thr Leu Ser Thr Gly Gln Pro Val Ser Pro Gly Arg		
50	55	60
Leu Leu Ala His His Ser Trp Gly Pro Glu Glu Ala Pro Ala Gly Gly		
65	70	75
Gly Ser Gly Pro Gly Leu Ser Leu Ser Leu His Thr Asp Trp Ser Pro		
85	90	95
Ala Leu Ser Pro Thr Gly Thr Leu Arg Gly Asn Phe Ser Lys Val Leu		
100	105	110
Trp Gly Gln Arg Glu Val Val Glu Pro Ala Arg Leu Trp Glu Ala Pro		
115	120	125
Glu Lys Leu Pro Leu Pro Thr Ser Val Leu Ala Gly Phe Gly Pro Trp		
130	135	140
Ala Gly Pro Pro Gln Ala Pro Lys Gly Lys Val Val Gln Gly Lys Ala		
145	150	155
Leu Glu Ala Ala Gly Ile Arg Val Gly His Thr Glu Gly Tyr Gln Val		
165	170	175
Leu Trp Gly Pro Trp Gly Pro Ala Leu Glu Ala Asp Arg Ser Thr Gly		
180	185	190
Leu Arg Met Ser Cys Cys Pro Arg Thr Trp Trp Ser Gly Pro Gly Arg		
195	200	205
Ala Ala Pro Pro Pro Pro Ile Pro His Leu Val Ile Thr		
210	215	220

<210> 3316

<211> 256

<212> PRT

<213> Homo sapiens

<400> 3316

Met Gly Cys Ala Arg Arg His Ala Gly Pro Arg Gly Ser Pro Val Lys

1 5 10 15

Gly Ser Gly Gly Leu Asp Ser Leu Trp Ala Trp Gly Gly Val Val Ser

20 25 30

Leu Cys Trp Leu Ser Tyr Arg Trp Trp Pro Val Ser Pro Gly Ser Gly

35 40 45

Cys Ser His Val Pro Ala Pro Thr Leu Pro Ala Arg Asp Arg Pro His

50 55 60

Gln Asp Pro Gly Ala Ala Pro Ala Ser Ala Arg Leu Ser Pro Arg Ser

65 70 75 80

Gln Val Arg Pro Gln Pro Leu Arg His Ala Ser Gly Ser Ser Cys Cys

85 90 95

Thr Cys Ser Ser Pro Cys Ala Ser Thr Leu Leu Ser Gly Phe Leu Pro

100 105 110

Leu Ala Thr Gly Arg Val Cys Val Lys Pro Gln Gly Leu Gln Lys Leu

115 120 125

Glu Val Pro Leu Ser Gly Arg Ile Met His Cys Thr Arg Gly Ile Lys

130 135 140

Gly Gly Asp Arg Lys Asn Tyr Gly Cys Cys Asp Thr Ser Pro Thr Ala

145 150 155 160

Pro Arg Leu Ala Ala Thr Ala Thr Arg Arg Asp Phe Ser Val Ala Ser

165 170 175

Arg Gly Val Gly Gln Arg Trp Ser Leu Val Thr Phe Ser Leu Gly Pro

180 185 190

Ala Pro Gly Leu Ser Ser Leu Gly Asn Ser Thr Ser Leu Ser Thr Pro

195	200	205
Leu Glu Gly Leu Thr Met Arg Gly Ala Gln Thr Gly Gly Ile Thr Thr		
210	215	220
Trp Phe Gly Leu Tyr His Ser Pro Arg Asp Lys Ala Arg Gln Thr Pro		
225	230	235
Leu His Ile Arg Ser Glu Phe Glu Leu Trp Leu His Asp Thr Asp Thr		
245	250	255

<210> 3317

<211> 639

<212> PRT

<213> Homo sapiens

<400> 3317

Met Gly Pro Gln Gly Ala Arg Arg Gln Ala Phe Leu Ala Phe Gly Asp		
1	5	10
Val Thr Val Asp Phe Thr Gln Lys Glu Trp Arg Leu Leu Ser Pro Ala		
20	25	30
Gln Arg Ala Leu Tyr Arg Glu Val Thr Leu Glu Asn Tyr Ser His Leu		
35	40	45
Val Ser Leu Gly Ile Leu His Ser Lys Pro Glu Leu Ile Arg Arg Leu		
50	55	60
Glu Gln Gly Glu Val Pro Trp Gly Glu Glu Arg Arg Arg Pro Gly		
65	70	75
Pro Cys Ala Gly Ile Tyr Ala Glu His Val Leu Arg Pro Lys Asn Leu		
85	90	95
Gly Leu Ala His Gln Arg Gln Gln Leu Gln Phe Ser Asp Gln Ser		
100	105	110

Phe Gln Ser Asp Thr Ala Glu Gly Gln Glu Lys Glu Lys Ser Thr Lys
 115 120 125
 Pro Met Ala Phe Ser Ser Pro Pro Leu Arg His Ala Val Ser Ser Arg
 130 135 140
 Arg Arg Asn Ser Val Val Glu Ile Glu Ser Ser Gln Gly Gln Arg Glu
 145 150 155 160
 Asn Pro Thr Glu Ile Asp Lys Val Leu Lys Gly Ile Glu Asn Ser Arg
 165 170 175
 Trp Gly Ala Phe Lys Cys Ala Glu Arg Gly Gln Asp Phe Ser Arg Lys
 180 185 190
 Met Met Val Ile Ile His Lys Lys Ala His Ser Arg Gln Lys Leu Phe
 195 200 205
 Thr Cys Arg Glu Cys His Gln Gly Phe Arg Asp Glu Ser Ala Leu Leu
 210 215 220
 Leu His Gln Asn Thr His Thr Gly Glu Lys Ser Tyr Val Cys Ser Val
 225 230 235 240
 Cys Gly Arg Gly Phe Ser Leu Lys Ala Asn Leu Leu Arg His Gln Arg
 245 250 255
 Thr His Ser Gly Glu Lys Pro Phe Leu Cys Lys Val Cys Gly Arg Gly
 260 265 270
 Tyr Thr Ser Lys Ser Tyr Leu Thr Val His Glu Arg Thr His Thr Gly
 275 280 285
 Glu Lys Pro Tyr Glu Cys Gln Glu Cys Gly Arg Arg Phe Asn Asp Lys
 290 295 300
 Ser Ser Tyr Asn Lys His Leu Lys Ala His Ser Gly Glu Lys Pro Phe
 305 310 315 320
 Val Cys Lys Glu Cys Gly Arg Gly Tyr Thr Asn Lys Ser Tyr Phe Val
 325 330 335
 Val His Lys Arg Ile His Ser Gly Glu Lys Pro Tyr Arg Cys Gln Glu

340	345	350
Cys Gly Arg Gly Phe Ser Asn Lys Ser His Leu Ile Thr His Gln Arg		
355	360	365
Thr His Ser Gly Glu Lys Pro Phe Ala Cys Arg Gln Cys Lys Gln Ser		
370	375	380
Phe Ser Val Lys Gly Ser Leu Leu Arg His Gln Arg Thr His Ser Gly		
385	390	395
Glu Lys Pro Phe Val Cys Lys Asp Cys Glu Arg Ser Phe Ser Gln Lys		
405	410	415
Ser Thr Leu Val Tyr His Gln Arg Thr His Ser Gly Glu Lys Pro Phe		
420	425	430
Val Cys Arg Glu Cys Gly Gln Gly Phe Ile Gln Lys Ser Thr Leu Val		
435	440	445
Lys His Gln Ile Thr His Ser Glu Glu Lys Pro Phe Val Cys Lys Asp		
450	455	460
Cys Gly Arg Gly Phe Ile Gln Lys Ser Thr Phe Thr Leu His Gln Arg		
465	470	475
Thr His Ser Glu Glu Lys Pro Tyr Gly Cys Arg Glu Cys Gly Arg Arg		
485	490	495
Phe Arg Asp Lys Ser Ser Tyr Asn Lys His Leu Arg Ala His Leu Gly		
500	505	510
Glu Lys Arg Phe Phe Cys Arg Asp Cys Gly Arg Gly Phe Thr Leu Lys		
515	520	525
Pro Asn Leu Thr Ile His Gln Arg Thr His Ser Gly Glu Lys Pro Phe		
530	535	540
Val Cys Asn Val Cys Gly Gln Gly Phe Ser Trp Lys Arg Ser Leu Thr		
545	550	555
Arg His His Trp Arg Ile His Ser Lys Glu Lys Pro Phe Val Cys Gln		
565	570	575

Glu Cys Lys Arg Gly Tyr Thr Ser Lys Ser Asp Leu Thr Val His Glu
 580 585 590
 Arg Ile His Thr Gly Glu Arg Pro Tyr Glu Cys Gln Glu Cys Gly Arg
 595 600 605
 Lys Phe Ser Asn Lys Ser Tyr Tyr Ser Lys His Leu Lys Arg His Leu
 610 615 620
 Arg Glu Lys Arg Phe Cys Thr Gly Ser Val Gly Glu Ala Ser Ser
 625 630 635

<210> 3318

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3318

Met Thr Ser Trp Ile Pro Leu Met Pro Gly Asp Ser Ala Asp Leu Phe
 1 5 10 15
 Gly Asp Gly Thr Thr Glu Asp Gly Ser Ala Ala Asn Gly Arg Leu Trp
 20 25 30
 Arg Thr Val Ile Ile Gly Glu Gln Glu His Arg Ile Asp Leu His Met
 35 40 45
 Ile Arg Pro Tyr Met Lys Val Val Thr His Gly Gly Tyr Tyr Gly Glu
 50 55 60
 Gly Leu Asn Ala Ile Ile Val Phe Ala Ala Cys Phe Leu Pro Asp Ser
 65 70 75 80
 Ser Leu Pro Asp Tyr His Tyr Ile Met Glu Asn Leu Phe Leu Tyr Val
 85 90 95
 Ile Ser Ser Leu Glu Leu Leu Val Ala Glu Asp Tyr Met Ile Val Tyr

100	105	110
Leu Asn Gly Ala Thr Pro Arg Arg Arg Met Pro Gly Ile Gly Trp Leu		
115	120	125
Lys Lys Cys Tyr Gln Met Ile Gly Arg Arg Leu Arg Lys Asn Leu Lys		
130	135	140
Ser Leu Ile Ile Val His Pro Ser Trp Phe Ile Arg Thr Val Leu Ala		
145	150	155
Ile Ser Arg Pro Phe Ile Ser Val Lys Phe Ile Asn Lys Ile Gln Tyr		
165	170	175
Val His Ser Leu Glu Asp Leu Glu Gln Leu Ile Pro Met Glu His Val		
180	185	190
Gln Ile Pro Asp Cys Val Leu Gln Tyr Glu Glu Glu Arg Leu Lys Ala		
195	200	205
Arg Arg Glu Ser Ala Arg Pro Gln Pro Glu Phe Val Leu Pro Arg Ser		
210	215	220
Glu Glu Lys Pro Glu Val Ala Pro Val Glu Asn Arg Ser Ala Leu Val		
225	230	235
Ser Glu Asp Gln Glu Thr Ser Met Ser		
245		

<210> 3319

<211> 959

<212> PRT

<213> Homo sapiens

<400> 3319

Met Ala Pro Tyr Gln Gly Pro Ala Leu Tyr Val Tyr Asn Asn Ala Val

1

5

10

15

Phe Thr Pro Glu Asp Trp His Gly Ile Gln Glu Ile Ala Arg Ser Arg
 20 25 30
 Lys Lys Asp Asp Pro Leu Lys Val Gly Arg Phe Gly Ile Gly Phe Asn
 35 40 45
 Ser Val Tyr His Ile Thr Asp Val Pro Cys Ile Phe Ser Gly Asp Gln
 50 55 60
 Ile Gly Met Leu Asp Pro His Gln Thr Leu Phe Gly Pro His Glu Ser
 65 70 75 80
 Gly Gln Cys Trp Asn Leu Lys Asp Asp Ser Lys Glu Ile Ser Glu Leu
 85 90 95
 Ser Asp Gln Phe Ala Pro Phe Val Gly Ile Phe Gly Ser Thr Lys Glu
 100 105 110
 Thr Phe Ile Asn Gly Asn Phe Pro Gly Thr Phe Phe Arg Phe Pro Leu
 115 120 125
 Arg Leu Gln Pro Ser Gln Leu Ser Ser Asn Leu Tyr Asn Lys Gln Lys
 130 135 140
 Val Leu Glu Leu Phe Glu Ser Phe Arg Ala Asp Ala Asp Thr Val Leu
 145 150 155 160
 Leu Phe Leu Lys Ser Val Gln Asp Val Ser Leu Tyr Val Arg Glu Ala
 165 170 175
 Asp Gly Thr Glu Lys Leu Val Phe Arg Val Thr Ser Ser Glu Ser Lys
 180 185 190
 Ala Leu Lys His Glu Arg Pro Asn Ser Ile Lys Ile Leu Gly Thr Ala
 195 200 205
 Ile Ser Asn Tyr Cys Lys Lys Thr Pro Ser Asn Asn Ile Thr Cys Val
 210 215 220
 Thr Tyr His Val Asn Ile Val Leu Glu Glu Ser Thr Lys Asp Ala
 225 230 235 240
 Gln Lys Thr Ser Trp Leu Val Cys Asn Ser Val Gly Gly Arg Gly Ile

245	250	255
Ser Ser Lys Leu Asp Ser Leu Ala Asp Glu Leu Lys Phe Val Pro Ile		
260	265	270
Ile Gly Ile Ala Met Pro Leu Ser Ser Arg Asp Asp Glu Ala Lys Gly		
275	280	285
Ala Thr Ser Asp Phe Ser Gly Lys Ala Phe Cys Phe Leu Pro Leu Pro		
290	295	300
Pro Gly Glu Glu Ser Ser Thr Gly Leu Pro Val His Ile Ser Gly Phe		
305	310	315
Phe Gly Leu Thr Asp Asn Arg Arg Ser Ile Lys Trp Arg Glu Leu Asp		
325	330	335
Gln Trp Arg Asp Pro Ala Ala Leu Trp Asn Glu Phe Leu Val Met Asn		
340	345	350
Val Val Pro Lys Ala Tyr Ala Thr Leu Ile Leu Asp Ser Ile Lys Arg		
355	360	365
Leu Glu Met Glu Lys Ser Ser Asp Phe Pro Leu Ser Val Asp Val Ile		
370	375	380
Tyr Lys Leu Trp Pro Glu Ala Ser Lys Val Lys Val His Trp Gln Pro		
385	390	395
Val Leu Glu Pro Leu Phe Ser Glu Leu Leu Gln Asn Ala Val Ile Tyr		
405	410	415
Ser Ile Ser Cys Asp Trp Val Arg Leu Glu Gln Val Tyr Phe Ser Glu		
420	425	430
Leu Asp Glu Asn Leu Glu Tyr Thr Lys Thr Val Leu Asn Tyr Leu Gln		
435	440	445
Ser Ser Gly Lys Gln Ile Ala Lys Val Pro Gly Asn Val Asp Ala Ala		
450	455	460
Val Gln Leu Thr Ala Ala Ser Gly Thr Thr Pro Val Arg Lys Val Thr		
465	470	475
		480

Pro Ala Trp Val Arg Gln Val Leu Arg Lys Cys Ala His Leu Gly Cys
 485 490 495
 Ala Glu Glu Lys Leu His Leu Leu Glu Phe Val Leu Ser Asp Gln Ala
 500 505 510
 Tyr Ser Glu Leu Leu Gly Leu Glu Leu Leu Pro Leu Gln Asn Gly Asn
 515 520 525
 Phe Val Pro Phe Ser Ser Ser Val Ser Asp Gln Asp Val Ile Tyr Ile
 530 535 540
 Thr Ser Ala Glu Tyr Pro Arg Ser Leu Phe Pro Ser Leu Glu Gly Arg
 545 550 555 560
 Phe Ile Leu Asp Asn Leu Lys Pro His Leu Val Ala Ala Leu Lys Glu
 565 570 575
 Ala Ala Gln Thr Arg Gly Arg Pro Cys Thr Gln Leu Gln Leu Leu Asn
 580 585 590
 Pro Glu Arg Phe Ala Arg Leu Ile Lys Glu Val Met Asn Thr Phe Trp
 595 600 605
 Pro Gly Arg Glu Leu Ile Val Gln Trp Tyr Pro Phe Asp Glu Asn Arg
 610 615 620
 Asn His Pro Ser Val Ser Trp Leu Lys Met Val Trp Lys Asn Leu Tyr
 625 630 635 640
 Ile His Phe Ser Glu Asp Leu Thr Leu Phe Asp Glu Met Pro Leu Ile
 645 650 655
 Pro Arg Thr Ile Leu Glu Glu Gly Gln Thr Cys Val Glu Leu Ile Arg
 660 665 670
 Leu Arg Ile Pro Ser Leu Val Ile Leu Asp Asp Glu Ser Glu Ala Gln
 675 680 685
 Leu Pro Glu Phe Leu Ala Asp Ile Val Gln Lys Leu Gly Gly Phe Val
 690 695 700
 Leu Lys Lys Leu Asp Ala Ser Ile Gln His Pro Leu Ile Lys Lys Tyr

705	710	715	720
Ile His Ser Pro Leu Pro Ser Ala Val Leu Gln Ile Met Glu Lys Met			
725	730	735	
Pro Leu Gln Lys Leu Cys Asn Gln Ile Thr Ser Leu Leu Pro Thr His			
740	745	750	
Lys Asp Ala Leu Arg Lys Phe Leu Ala Ser Leu Thr Asp Ser Ser Glu			
755	760	765	
Lys Glu Lys Arg Ile Ile Gln Glu Leu Ala Ile Phe Lys Arg Ile Asn			
770	775	780	
His Ser Ser Asp Gln Gly Ile Ser Ser Tyr Thr Lys Leu Lys Gly Cys			
785	790	795	800
Lys Val Leu His His Thr Ala Lys Leu Pro Ala Asp Leu Arg Leu Ser			
805	810	815	
Ile Ser Val Ile Asp Ser Ser Asp Glu Ala Thr Ile Arg Leu Ala Asn			
820	825	830	
Met Leu Lys Ile Glu Gln Leu Lys Thr Thr Ser Cys Leu Lys Leu Val			
835	840	845	
Leu Lys Asp Ile Glu Asn Ala Phe Tyr Ser His Glu Glu Val Thr Gln			
850	855	860	
Leu Met Leu Trp Val Leu Glu Asn Leu Ser Ser Leu Lys Asn Glu Asn			
865	870	875	880
Pro Asn Val Leu Glu Trp Leu Thr Pro Leu Lys Phe Ile Gln Ile Ser			
885	890	895	
Gln Glu Gln Met Val Ser Ala Gly Glu Leu Phe Asp Pro Asp Ile Glu			
900	905	910	
Val Leu Lys Asp Leu Phe Cys Asn Glu Glu Gly Thr Tyr Phe Pro Pro			
915	920	925	
Ser Val Phe Thr Ser Pro Asp Ile Leu His Ser Leu Arg Gln Ile Gly			
930	935	940	

Leu Lys Asn Glu Ala Ser Leu Lys Glu Lys Asp Val Val Gln Val

945 950 955

<210> 3320

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3320

Met Gly Ser Ala Leu Gly Thr Ala Gly Ser Trp Ala Gln Lys Gly Gly

1 5 10 15

Thr Lys Val Cys Val Gln His Gln Glu Gln Gln Ala Ala Gly His Lys

20 25 30

Arg Glu Val Leu Gly Met Trp Val Gln His Gln Gly Gln Arg Ser Thr

35 40 45

Lys Gly Lys Arg Cys Gly Tyr Glu Phe Ser Thr Lys Asp Ser Gly Gln

50 55 60

Leu Ile Leu Ala Gly Val Leu Gly Met His Phe Arg His Glu Tyr Gln

65 70 75 80

Leu Pro Arg Pro Gly Thr Val Val His Ala Leu Ile Pro Ala Leu Trp

85 90 95

Glu Ala Lys Ala Asp Gly Ser Arg Gly Gln Gln Phe Glu Thr Ser Leu

100 105 110

Ala Asn Ile Val Lys Leu Cys Leu Tyr

115 120

<210> 3321

<211> 1268

<212> PRT

<213> Homo sapiens

<400> 3321

Met	Arg	Glu	Leu	Glu	Met	Ser	Arg	Thr	Asn	Thr	Glu	Asn	Ile	Glu	Thr
1					5				10					15	
Ser	Thr	Glu	Thr	Ala	Glu	Ser	Ser	Ser	Glu	Ser	Leu	Ser	Ser	Leu	Glu
						20			25				30		
Gln	Leu	Asp	Leu	Leu	Phe	Glu	Lys	Gln	Gly	Ala	Val	Arg	Lys	Ala	
							35		40			45			
Gly	Trp	Leu	Phe	Phe	Lys	Pro	Leu	Val	Thr	Val	Gln	Lys	Glu	Arg	Lys
							50		55			60			
Leu	Glu	Leu	Val	Ala	Arg	Arg	Lys	Trp	Lys	Gln	Tyr	Trp	Val	Thr	Leu
					65			70			75		80		
Lys	Gly	Cys	Thr	Leu	Leu	Phe	Tyr	Glu	Thr	Tyr	Gly	Lys	Asn	Ser	Met
						85			90			95			
Asp	Gln	Ser	Ser	Ala	Pro	Arg	Cys	Ala	Leu	Phe	Ala	Glu	Asp	Ser	Ile
					100			105			110				
Val	Gln	Ser	Val	Pro	Glu	His	Pro	Lys	Glu	Asn	Val	Phe	Cys	Leu	
					115			120			125				
Ser	Asn	Ser	Phe	Gly	Asp	Val	Tyr	Leu	Phe	Gln	Ala	Thr	Ser	Gln	Thr
					130			135			140				
Asp	Leu	Glu	Asn	Trp	Val	Thr	Ala	Val	His	Ser	Ala	Cys	Ala	Ser	Leu
					145			150			155		160		
Phe	Ala	Lys	Lys	His	Gly	Lys	Glu	Asp	Thr	Leu	Arg	Leu	Leu	Lys	Asn
						165			170			175			
Gln	Thr	Lys	Asn	Leu	Leu	Gln	Lys	Ile	Asp	Met	Asp	Ser	Lys	Met	Lys
						180			185			190			

Lys Met Ala Glu Leu Gln Leu Ser Val Val Ser Asp Pro Lys Asn Arg
 195 200 205
 Lys Ala Ile Glu Asn Gln Ile Gln Gln Trp Glu Gln Asn Leu Glu Lys
 210 215 220
 Phe His Met Asp Leu Phe Arg Met Arg Cys Tyr Leu Ala Ser Leu Gln
 225 230 235 240
 Gly Gly Glu Leu Pro Asn Pro Lys Ser Leu Leu Ala Ala Ala Ser Arg
 245 250 255
 Pro Ser Lys Leu Ala Leu Gly Arg Leu Gly Ile Leu Ser Val Ser Ser
 260 265 270
 Phe His Ala Leu Val Cys Ser Arg Asp Asp Ser Ala Leu Arg Lys Arg
 275 280 285
 Thr Leu Ser Leu Thr Gln Arg Gly Arg Asn Lys Gly Ile Phe Ser
 290 295 300
 Ser Leu Lys Gly Leu Asp Thr Leu Ala Arg Lys Gly Lys Glu Lys Arg
 305 310 315 320
 Pro Ser Ile Thr Gln Val Asp Glu Leu Leu His Ile Tyr Gly Ser Thr
 325 330 335
 Val Asp Gly Val Pro Arg Asp Asn Ala Trp Glu Ile Gln Thr Tyr Val
 340 345 350
 His Phe Gln Asp Asn His Gly Val Thr Val Gly Ile Lys Pro Glu His
 355 360 365
 Arg Val Glu Asp Ile Leu Thr Leu Ala Cys Lys Met Arg Gln Leu Glu
 370 375 380
 Pro Ser His Tyr Gly Leu Gln Leu Arg Lys Leu Val Asp Asp Asn Val
 385 390 395 400
 Glu Tyr Cys Ile Pro Ala Pro Tyr Glu Tyr Met Gln Gln Gln Val Tyr
 405 410 415
 Asp Glu Ile Glu Val Phe Pro Leu Asn Val Tyr Asp Val Gln Leu Thr

420	425	430
Lys Thr Gly Ser Val Cys Asp Phe Gly Phe Ala Val Thr Ala Gln Val		
435	440	445
Asp Glu Arg Gln His Leu Ser Arg Ile Phe Ile Ser Asp Val Leu Pro		
450	455	460
Asp Gly Leu Ala Tyr Gly Glu Gly Leu Arg Lys Gly Asn Glu Ile Met		
465	470	475
Thr Leu Asn Gly Glu Ala Val Ser Asp Leu Asp Leu Lys Gln Met Glu		
485	490	495
Ala Leu Phe Ser Glu Lys Ser Val Gly Leu Thr Leu Ile Ala Arg Pro		
500	505	510
Pro Asp Thr Lys Ala Thr Leu Cys Thr Ser Trp Ser Asp Ser Asp Leu		
515	520	525
Phe Ser Arg Asp Gln Lys Ser Leu Leu Pro Pro Asn Gln Ser Gln		
530	535	540
Leu Leu Glu Glu Phe Leu Asp Asn Phe Lys Lys Asn Thr Ala Asn Asp		
545	550	555
Phe Ser Asn Val Pro Asp Ile Thr Thr Gly Leu Lys Arg Ser Gln Thr		
565	570	575
Asp Gly Thr Leu Asp Gln Val Ser His Arg Glu Lys Met Glu Gln Thr		
580	585	590
Phe Arg Ser Ala Glu Gln Ile Thr Ala Leu Cys Lys Ser Phe Asn Asp		
595	600	605
Ser Gln Ala Asn Gly Met Glu Gly Pro Arg Glu Asn Gln Asp Pro Pro		
610	615	620
Pro Arg Pro Leu Ala Arg His Leu Ser Asp Ala Asp Arg Leu Arg Lys		
625	630	635
Val Ile Gln Glu Leu Val Asp Thr Glu Lys Ser Tyr Val Lys Asp Leu		
645	650	655

Ser Cys Leu Phe Glu Leu Tyr Leu Glu Pro Leu Gln Asn Glu Thr Phe
 660 665 670
 Leu Thr Gln Asp Glu Met Glu Ser Leu Phe Gly Ser Leu Pro Glu Met
 675 680 685
 Leu Glu Phe Gln Lys Val Phe Leu Glu Thr Leu Glu Asp Gly Ile Ser
 690 695 700
 Ala Ser Ser Asp Phe Asn Thr Leu Glu Thr Pro Ser Gln Phe Arg Lys
 705 710 715 720
 Leu Leu Phe Pro Leu Gly Gly Ser Phe Leu Tyr Tyr Ala Asp His Phe
 725 730 735
 Lys Leu Tyr Ser Gly Phe Cys Ala Asn His Ile Lys Val Gln Lys Val
 740 745 750
 Leu Glu Arg Ala Lys Thr Asp Lys Ala Phe Lys Ala Phe Leu Asp Ala
 755 760 765
 Arg Asn Pro Thr Lys Gln His Ser Ser Thr Leu Glu Ser Tyr Leu Ile
 770 775 780
 Lys Pro Val Gln Arg Val Leu Lys Tyr Pro Leu Leu Lys Glu Leu
 785 790 795 800
 Val Ser Leu Thr Asp Gln Glu Ser Glu Glu His Tyr His Leu Thr Glu
 805 810 815
 Ala Leu Lys Ala Met Glu Lys Val Ala Ser His Ile Asn Glu Met Gln
 820 825 830
 Lys Ile Tyr Glu Asp Tyr Gly Thr Val Phe Asp Arg Leu Val Ala Glu
 835 840 845
 Gln Ser Gly Thr Glu Lys Glu Gln Pro Glu Trp Ser Ser Glu Val Met
 850 855 860
 Asp Val Leu Asp Pro Arg Gly Lys Leu Thr Lys Gly Thr Leu Glu Glu
 865 870 875 880
 Pro Arg Thr Leu Val Thr Glu Leu Ser Met Gly Glu Leu Leu Met His

	885	890	895
Ser Thr Val Ser Trp Leu Asn Pro Phe Leu Ser Leu Gly Lys Ala Arg			
900	905	910	
Lys Asp Leu Glu Leu Thr Val Phe Val Phe Lys Arg Ala Val Ile Leu			
915	920	925	
Val Tyr Lys Lys Asn Cys Lys Leu Lys Lys Leu Pro Ser Asn Ser			
930	935	940	
Arg Pro Ala His Asn Ser Thr Asp Leu Asp Pro Phe Lys Phe Arg Trp			
945	950	955	960
Leu Ile Pro Ile Ser Ala Leu Gln Val Arg Leu Gly Asn Pro Ala Gly			
965	970	975	
Thr Glu Asn Asn Ser Ile Trp Glu Leu Ile His Thr Lys Ser Glu Ile			
980	985	990	
Glu Gly Arg Pro Glu Thr Ile Phe Gln Leu Cys Cys Ser Asp Ser Glu			
995	1000	1005	
Ser Lys Thr Asn Ile Val Lys Val Ile Arg Ser Ile Leu Arg Glu Asn			
1010	1015	1020	
Phe Arg Arg His Ile Lys Cys Glu Leu Pro Leu Glu Lys Thr Cys Lys			
1025	1030	1035	1040
Asp Arg Leu Val Pro Leu Lys Asn Arg Val Pro Val Ser Ala Lys Leu			
1045	1050	1055	
Ala Ser Ser Arg Ser Leu Lys Val Leu Lys Asn Ser Ser Ser Asn Glu			
1060	1065	1070	
Trp Thr Gly Glu Thr Gly Lys Gly Thr Leu Leu Asp Ser Tyr Glu Gly			
1075	1080	1085	
Ser Leu Ser Ser Gly Thr Gln Ser Ser Gly Cys Pro Thr Ala Glu Gly			
1090	1095	1100	
Arg Gln Asp Ser Lys Ser Thr Ser Pro Gly Lys Tyr Pro His Pro Gly			
1105	1110	1115	1120

Leu Ala Asp Phe Ala Asp Asn Leu Ile Lys Glu Ser Asp Ile Leu Ser
 1125 1130 1135
 Asp Glu Asp Asp Asp His Arg Gln Thr Val Lys Gln Gly Ser Pro Thr
 1140 1145 1150
 Lys Asp Ile Glu Ile Gln Phe Gln Arg Leu Arg Ile Ser Glu Asp Pro
 1155 1160 1165
 Asp Val His Pro Glu Ala Glu Gln Gln Pro Gly Pro Glu Ser Gly Glu
 1170 1175 1180
 Gly Gln Lys Gly Gly Glu Gln Pro Lys Leu Val Arg Gly His Phe Cys
 1185 1190 1195 1200
 Pro Ile Lys Arg Lys Thr Asn Ser Thr Lys Arg Asp Arg Gly Thr Leu
 1205 1210 1215
 Leu Lys Ala Gln Ile Arg His Gln Ser Leu Asp Ser Gln Ser Glu Asn
 1220 1225 1230
 Ala Thr Ile Asp Leu Asn Ser Val Leu Glu Arg Glu Phe Ser Val Gln
 1235 1240 1245
 Ser Leu Thr Ser Val Val Ser Glu Glu Cys Phe Tyr Glu Thr Glu Ser
 1250 1255 1260
 His Gly Lys Ser
 1265

<210> 3322

<211> 514

<212> PRT

<213> Homo sapiens

<400> 3322

Met Glu Glu Asn Val Phe Trp Glu Cys Lys Ala Asn Gly Arg Pro Lys

1	5	10	15
Pro Thr Tyr Lys Trp Leu Lys Asn Gly Glu Pro Leu Leu Thr Arg Asp			
20	25	30	
Arg Ile Gln Ile Glu Gln Gly Thr Leu Asn Ile Thr Ile Val Asn Leu			
35	40	45	
Ser Asp Ala Gly Met Tyr Gln Cys Leu Ala Glu Asn Lys His Gly Val			
50	55	60	
Ile Phe Ser Asn Ala Glu Leu Ser Val Ile Ala Val Gly Pro Asp Phe			
65	70	75	80
Ser Arg Thr Leu Leu Lys Arg Val Thr Leu Val Lys Val Gly Gly Glu			
85	90	95	
Val Val Ile Glu Cys Lys Pro Lys Ala Ser Pro Lys Pro Val Tyr Thr			
100	105	110	
Trp Lys Lys Gly Arg Asp Ile Leu Lys Glu Asn Glu Arg Ile Thr Ile			
115	120	125	
Ser Glu Asp Gly Asn Leu Arg Ile Ile Asn Val Thr Lys Ser Asp Ala			
130	135	140	
Gly Ser Tyr Thr Cys Ile Ala Thr Asn His Phe Gly Thr Ala Ser Ser			
145	150	155	160
Thr Gly Asn Leu Val Val Lys Asp Pro Thr Arg Val Met Val Pro Pro			
165	170	175	
Ser Ser Met Asp Val Thr Val Gly Glu Ser Ile Val Leu Pro Cys Gln			
180	185	190	
Val Thr His Asp His Ser Leu Asp Ile Val Phe Thr Trp Ser Phe Asn			
195	200	205	
Gly His Leu Ile Asp Phe Asp Arg Asp Gly Asp His Phe Glu Arg Val			
210	215	220	
Gly Gly Asp Ser Ala Gly Asp Leu Met Ile Arg Asn Ile Gln Leu Lys			
225	230	235	240

His Ala Gly Lys Tyr Val Cys Met Val Gln Thr Ser Val Asp Arg Leu
 245 250 255
 Ser Ala Ala Ala Asp Leu Ile Val Arg Gly Pro Pro Gly Pro Pro Glu
 260 265 270
 Ala Val Thr Ile Asp Glu Ile Thr Asp Thr Thr Ala Gln Leu Ser Trp
 275 280 285
 Arg Pro Gly Pro Asp Asn His Ser Pro Ile Thr Met Tyr Val Ile Gln
 290 295 300
 Ala Arg Thr Pro Phe Ser Val Gly Trp Gln Ala Val Ser Thr Val Pro
 305 310 315 320
 Glu Leu Ile Asp Gly Lys Thr Phe Thr Ala Thr Val Val Gly Leu Asn
 325 330 335
 Pro Trp Val Glu Tyr Glu Phe Arg Thr Val Ala Ala Asn Val Ile Gly
 340 345 350
 Ile Gly Glu Pro Ser Arg Pro Ser Glu Lys Arg Arg Thr Glu Glu Ala
 355 360 365
 Leu Pro Glu Val Thr Pro Ala Asn Val Ser Gly Gly Gly Ser Lys
 370 375 380
 Ser Glu Leu Val Ile Thr Trp Glu Thr Val Pro Glu Glu Leu Gln Asn
 385 390 395 400
 Gly Arg Gly Phe Gly Tyr Val Val Ala Phe Arg Pro Tyr Gly Lys Met
 405 410 415
 Ile Trp Met Leu Thr Val Leu Ala Ser Ala Asp Ala Ser Arg Tyr Val
 420 425 430
 Phe Arg Asn Glu Ser Val His Pro Phe Ser Pro Phe Glu Val Lys Val
 435 440 445
 Gly Val Phe Asn Asn Lys Gly Glu Gly Pro Phe Ser Pro Thr Thr Val
 450 455 460
 Val Tyr Ser Ala Glu Glu Glu Pro Thr Lys Pro Pro Ala Ser Ile Phe

465 470 475 480
 Ala Arg Ser Leu Ser Ala Thr Asp Ile Glu Val Phe Trp Ala Ser Pro
 485 490 495
 Leu Glu Lys Asn Arg Gly Arg Ile Gln Gly Tyr Glu Val Lys Tyr Trp
 500 505 510
 Arg His

<210> 3323

<211> 429

<212> PRT

<213> Homo sapiens

<400> 3323

Met Leu Gly Lys Arg Phe Pro Asn Ile Lys Val Ile Glu Ser Gly Val
 1 5 10 15

Lys Gln Leu Lys Ser Glu Glu His Cys Ile Val Thr Glu Asp Gly Asn
 20 25 30

Gln His Val Tyr Lys Lys Leu Cys Leu Cys Ala Gly Ala Lys Pro Lys
 35 40 45

Leu Ile Cys Glu Gly Asn Pro Tyr Val Leu Gly Ile Arg Asp Thr Asp
 50 55 60

Ser Ala Gln Glu Phe Gln Lys Gln Leu Thr Lys Ala Lys Arg Ile Met
 65 70 75 80

Ile Ile Gly Asn Gly Gly Ile Ala Leu Glu Leu Val Tyr Glu Ile Glu
 85 90 95

Gly Cys Glu Val Ile Trp Ala Ile Lys Asp Lys Ala Ile Gly Asn Thr
 100 105 110

Phe Phe Asp Ala Gly Ala Ala Glu Phe Leu Thr Ser Lys Leu Ile Ala
 115 120 125
 Glu Lys Ser Glu Ala Lys Ile Ala His Lys Arg Thr Arg Tyr Thr Thr
 130 135 140
 Glu Gly Arg Lys Lys Glu Ala Arg Ser Lys Ser Lys Ala Asp Asn Val
 145 150 155 160
 Gly Ser Ala Leu Gly Pro Asp Trp His Glu Gly Leu Asn Leu Lys Gly
 165 170 175
 Thr Lys Glu Phe Ser His Lys Ile His Leu Glu Thr Met Cys Glu Val
 180 185 190
 Lys Lys Ile Tyr Leu Gln Asp Glu Phe Arg Ile Leu Lys Lys Ser
 195 200 205
 Phe Thr Phe Pro Arg Asp His Lys Ser Val Thr Ala Asp Thr Glu Met
 210 215 220
 Trp Pro Val Tyr Val Glu Leu Thr Asn Glu Lys Ile Tyr Gly Cys Asp
 225 230 235 240
 Phe Ile Val Ser Ala Thr Gly Val Thr Pro Asn Val Glu Pro Phe Leu
 245 250 255
 His Gly Asn Ser Phe Asp Leu Gly Glu Asp Gly Gly Leu Lys Val Asp
 260 265 270
 Asp His Met His Thr Ser Leu Pro Asp Ile Tyr Ala Ala Gly Asp Ile
 275 280 285
 Cys Thr Thr Ser Trp Gln Leu Ser Pro Val Trp Gln Gln Met Arg Leu
 290 295 300
 Trp Thr Gln Ala Arg Gln Met Gly Trp Tyr Ala Ala Lys Cys Met Ala
 305 310 315 320
 Ala Ala Ser Ser Gly Asp Ser Ile Asp Met Asp Phe Ser Phe Glu Leu
 325 330 335
 Phe Ala His Val Thr Lys Phe Phe Asn Tyr Lys Val Val Leu Leu Gly

340	345	350
Lys Tyr Asn Ala Gln Gly Leu Gly Ser Asp His Glu Leu Met Leu Arg		
355	360	365
Cys Thr Lys Gly Arg Glu Tyr Ile Lys Val Val Met Gln Asn Gly Arg		
370	375	380
Met Met Gly Ala Val Leu Ile Gly Glu Thr Asp Leu Glu Glu Thr Phe		
385	390	395
Glu Asn Leu Ile Leu Asn Gln Met Asn Leu Ser Ser Tyr Gly Glu Asp		
405	410	415
Leu Leu Asp Pro Asn Ile Asp Ile Glu Asp Tyr Phe Asp		
420	425	

<210> 3324

<211> 1130

<212> PRT

<213> Homo sapiens

<400> 3324

Met Gly Lys Val Gly Ala Gly Gly Ser Gln Ala Arg Leu Ser Ala			
1	5	10	15
Leu Leu Ala Gly Ala Gly Leu Leu Ile Leu Cys Ala Pro Gly Val Cys			
20	25	30	
Gly Gly Gly Ser Cys Cys Pro Ser Pro His Pro Ser Ser Ala Pro Arg			
35	40	45	
Ser Ala Ser Thr Pro Arg Gly Phe Ser His Gln Gly Arg Pro Gly Arg			
50	55	60	
Ala Pro Ala Thr Pro Leu Pro Leu Val Val Arg Pro Leu Phe Ser Val			
65	70	75	80

Ala Pro Gly Asp Arg Ala Leu Ser Leu Glu Arg Ala Arg Gly Thr Gly
 85 90 95
 Ala Ser Met Ala Val Ala Ala Arg Ser Gly Arg Arg Arg Arg Ser Gly
 100 105 110
 Ala Asp Gln Glu Lys Ala Glu Arg Gly Glu Gly Ala Ser Arg Ser Pro
 115 120 125
 Arg Gly Val Leu Arg Asp Gly Gly Gln Gln Glu Pro Gly Thr Arg Glu
 130 135 140
 Arg Asp Pro Asp Lys Ala Thr Arg Phe Arg Met Glu Glu Leu Arg Leu
 145 150 155 160
 Thr Ser Thr Thr Phe Ala Leu Thr Gly Asp Ser Ala His Asn Gln Ala
 165 170 175
 Met Val His Trp Ser Gly His Asn Ser Ser Val Ile Leu Ile Leu Thr
 180 185 190
 Lys Leu Tyr Asp Tyr Asn Leu Gly Ser Ile Thr Glu Ser Ser Leu Trp
 195 200 205
 Arg Ser Thr Asp Tyr Gly Thr Thr Tyr Glu Lys Leu Asn Asp Lys Val
 210 215 220
 Gly Leu Lys Thr Ile Leu Ser Tyr Leu Tyr Val Cys Pro Thr Asn Lys
 225 230 235 240
 Arg Lys Ile Met Leu Leu Thr Asp Pro Glu Ile Glu Ser Ser Leu Leu
 245 250 255
 Ile Ser Ser Asp Glu Gly Ala Thr Tyr Gln Lys Tyr Arg Leu Asn Phe
 260 265 270
 Tyr Ile Gln Ser Leu Leu Phe His Pro Lys Gln Glu Asp Trp Ile Leu
 275 280 285
 Ala Tyr Ser Gln Asp Gln Lys Leu Tyr Ser Ser Ala Glu Phe Gly Arg
 290 295 300
 Arg Trp Gln Leu Ile Gln Glu Gly Val Val Pro Asn Arg Phe Tyr Trp

305	310	315	320
Ser Val Met Gly Ser Asn Lys Glu Pro Asp Leu Val His Leu Glu Ala			
325	330	335	
Arg Thr Val Asp Gly His Ser His Tyr Leu Thr Cys Arg Met Gln Asn			
340	345	350	
Cys Thr Glu Ala Asn Arg Asn Gln Pro Phe Pro Gly Tyr Ile Asp Pro			
355	360	365	
Asp Ser Leu Ile Val Gln Asp His Tyr Val Phe Val Gln Leu Thr Ser			
370	375	380	
Gly Gly Arg Pro His Tyr Tyr Val Ser Tyr Arg Arg Asn Ala Phe Ala			
385	390	395	400
Gln Met Lys Leu Pro Lys Tyr Ala Leu Pro Lys Asp Met His Val Ile			
405	410	415	
Ser Thr Asp Glu Asn Gln Val Phe Ala Ala Val Gln Glu Trp Asn Gln			
420	425	430	
Asn Asp Thr Tyr Asn Leu Tyr Ile Ser Asp Thr Arg Gly Val Tyr Phe			
435	440	445	
Thr Leu Ala Leu Glu Asn Val Gln Ser Ser Arg Gly Pro Glu Gly Asn			
450	455	460	
Ile Met Ile Asp Leu Tyr Glu Val Ala Gly Ile Lys Gly Met Phe Leu			
465	470	475	480
Ala Asn Lys Lys Ile Asp Asn Gln Val Lys Thr Phe Ile Thr Tyr Asn			
485	490	495	
Lys Gly Arg Asp Trp Arg Leu Leu Gln Ala Pro Asp Thr Asp Leu Arg			
500	505	510	
Gly Asp Pro Val His Cys Leu Leu Pro Tyr Cys Ser Leu His Leu His			
515	520	525	
Leu Lys Val Ser Glu Asn Pro Tyr Thr Ser Gly Ile Ile Ala Ser Lys			
530	535	540	

Asp Thr Ala Pro Ser Ile Ile Val Ala Ser Gly Asn Ile Gly Ser Glu
 545 550 555 560
 Leu Ser Asp Thr Asp Ile Ser Met Phe Val Ser Ser Asp Ala Gly Asn
 565 570 575
 Thr Trp Arg Gln Ile Phe Glu Glu His Ser Val Leu Tyr Leu Asp
 580 585 590
 Gln Gly Gly Val Leu Val Ala Met Lys His Thr Ser Leu Pro Ile Arg
 595 600 605
 His Leu Trp Leu Ser Phe Asp Glu Gly Arg Ser Trp Ser Lys Tyr Ser
 610 615 620
 Phe Thr Ser Ile Pro Leu Phe Val Asp Gly Val Leu Gly Glu Pro Gly
 625 630 635 640
 Glu Glu Thr Leu Ile Met Thr Val Phe Gly His Phe Ser His Arg Ser
 645 650 655
 Glu Trp Gln Leu Val Lys Val Asp Tyr Lys Ser Ile Phe Asp Arg Arg
 660 665 670
 Cys Ala Glu Glu Asp Tyr Arg Pro Trp Gln Leu His Ser Gln Gly Glu
 675 680 685
 Ala Cys Ile Met Gly Ala Lys Arg Ile Tyr Lys Arg Lys Ser Glu
 690 695 700
 Arg Lys Cys Met Gln Gly Lys Tyr Ala Gly Ala Met Glu Ser Glu Pro
 705 710 715 720
 Cys Val Cys Thr Glu Ala Asp Phe Asp Cys Asp Tyr Gly Tyr Glu Arg
 725 730 735
 His Ser Asn Gly Gln Cys Leu Pro Ala Phe Trp Phe Asn Pro Ser Ser
 740 745 750
 Leu Ser Lys Asp Cys Ser Leu Gly Gln Ser Tyr Leu Asn Ser Thr Gly
 755 760 765
 Tyr Arg Lys Val Val Ser Asn Asn Cys Thr Asp Gly Val Arg Glu Gln

770	775	780
Tyr Thr Ala Lys Pro Gln Lys Cys Pro Gly Lys Ala Pro Arg Gly Leu		
785	790	795
Arg Ile Val Thr Ala Asp Gly Lys Leu Thr Ala Glu Gln Gly His Asn		800
805	810	815
Val Thr Leu Met Val Gln Leu Glu Glu Gly Asp Val Gln Arg Thr Leu		
820	825	830
Ile Gln Val Asp Phe Gly Asp Gly Ile Ala Val Ser Tyr Val Asn Leu		
835	840	845
Ser Ser Met Glu Asp Gly Ile Lys His Val Tyr Gln Asn Val Gly Ile		
850	855	860
Phe Arg Val Thr Val Gln Val Asp Asn Ser Leu Gly Ser Asp Ser Ala		
865	870	875
Val Leu Tyr Leu His Val Thr Cys Pro Leu Glu His Val His Leu Ser		
885	890	895
Leu Pro Phe Val Thr Thr Lys Asn Lys Glu Val Asn Ala Thr Ala Val		
900	905	910
Leu Trp Pro Ser Gln Val Gly Thr Leu Thr Tyr Val Trp Trp Tyr Gly		
915	920	925
Asn Asn Thr Glu Pro Leu Ile Thr Leu Glu Gly Ser Ile Ser Phe Arg		
930	935	940
Phe Thr Ser Glu Gly Met Asn Thr Ile Thr Val Gln Val Ser Ala Gly		
945	950	955
Asn Ala Ile Leu Gln Asp Thr Lys Thr Ile Ala Val Tyr Glu Glu Phe		
965	970	975
Arg Ser Leu Arg Leu Ser Phe Ser Pro Asn Leu Asp Asp Tyr Asn Pro		
980	985	990
Asp Ile Pro Glu Trp Arg Arg Asp Ile Gly Arg Val Ile Lys Lys Ser		
995	1000	1005

Leu Val Glu Ala Thr Gly Val Pro Gly Gln His Ile Leu Val Ala Val
 1010 1015 1020
 Leu Pro Gly Leu Pro Thr Thr Ala Glu Leu Phe Val Leu Pro Tyr Gln
 1025 1030 1035 1040
 Asp Pro Ala Gly Glu Asn Lys Arg Ser Thr Asp Asp Leu Glu Gln Ile
 1045 1050 1055
 Ser Glu Leu Leu Ile His Thr Leu Asn Gln Asn Ser Val His Phe Glu
 1060 1065 1070
 Leu Lys Pro Gly Val Arg Val Leu Val His Ala Ala His Leu Thr Ala
 1075 1080 1085
 Ala Pro Leu Val Asp Leu Thr Pro Thr His Ser Gly Ser Ala Met Leu
 1090 1095 1100
 Val Leu Leu Ser Val Val Phe Val Gly Leu Ala Val Phe Val Ile Tyr
 1105 1110 1115 1120
 Lys Phe Lys Arg Lys Tyr Phe His Ser Cys
 1125 1130

<210> 3325

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3325

Met Met Ser Asp Gly Lys Leu Gly Arg Gln Ser Val Asp Ser Pro Cys
 1 5 10 15
 Ser Gly Thr Thr Cys Ser Leu Thr Ala Ala Gly Gly His Thr Thr Arg
 20 25 30
 Ile Ala Leu Leu Cys His Leu Val Ile Val Phe Phe Ala Leu Thr Glu

35	40	45
Asp Arg Lys Gly Gly Lys Ile Ser Phe Cys Ala His Thr Pro Leu Asn		
50	55	60
Cys Met Phe Gly Phe Phe Cys Phe Val Lys Gly Cys Lys Thr Ser Ser		
65	70	75
Ser Cys Ser Thr Ala Asn Thr Arg Gly Gln His Pro Ala Ser Cys Leu		
85	90	95
Cys Phe Pro Ala Gly Arg Thr His Arg Gln Ser Gly Asn Leu Thr Phe		
100	105	110
Pro Arg Ser Glu Asn Gly Leu Phe Ser Ser Glu Val Met Ile Arg Glu		
115	120	125
Ser Leu Leu Ile Phe Val Ile His Thr Lys Thr Leu Thr Ser Gly Glu		
130	135	140
Lys Leu Asp Thr Leu Asn Asn Glu Lys Ser Glu Gln Ala Phe Arg Gly		
145	150	155
Cys Val Ser His Thr Glu Gly Ala Ser Pro Trp Ala His Ser Gln Asp		
165	170	175
Pro Ser Phe Thr Asp His Arg Gly Cys Val Leu Gln Val Ala Asp Thr		
180	185	190
Ala Leu Trp Phe		
195		

<210> 3326

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3326

Met Leu Ser Leu Glu Cys Thr Gln Leu Pro His His Ala Ser Cys Thr
 1 5 10 15
 Cys Cys Ser Thr Ala Pro Pro Ser Val Ser Ala Ala Arg Pro Ser Pro
 20 25 30
 Cys Ser Ile Val Val Ser Phe Asp Cys Ala Gly Trp Arg Val Pro Cys
 35 40 45
 Pro Pro Ser Leu Val Phe Gln Asn Ser Phe Gly Trp Phe Cys Thr Cys
 50 55 60
 Val Phe His Met Val Phe Thr Ser Ile Val Arg Lys Thr Lys His Phe
 65 70 75 80
 Ser Lys Ser His Leu Glu Ser Phe Asn Pro Phe Met Ser Val Ser Ala
 85 90 95
 Lys Phe Ser Cys Gly Leu Ala Gly Leu Leu Cys Ser Val Pro Glu Arg
 100 105 110
 Ala Gly Leu Ser Leu Gly Ile Cys Arg His Pro Leu Trp His Ser Ala
 115 120 125
 Gly Thr Leu Ser Ser Asn Leu Leu Ala Pro Ser Ala Arg Trp Asp His
 130 135 140

<210> 3327

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3327

Met Tyr Phe Tyr Asp Gly Val Ser Arg Asp Ala Ala Ser Ala Ala Leu
 1 5 10 15
 Ala Asp Ala Ala Glu Glu Leu Leu Asp Arg Leu Ala Ser His Ser Met

20	25	30
Leu Pro Ser Asp Val Ser Ile Leu Tyr His Met Lys Thr Leu Leu Leu		
35	40	45
Leu Gln Asp Thr Glu Arg Leu Lys His Ala Leu Glu Met Phe Pro Glu		
50	55	60
His Cys Thr Met Pro Pro Gly Gly Lys Ser Glu Ala Gln Arg Ala Trp		
65	70	75
Ala Asn Gly Thr Gly His Thr Ala His Gln Trp Leu His Val Ser Ser		
85	90	95
Asp Leu Gly Leu Leu Leu Ser Val Phe Pro Ile Ser Met Thr Leu Thr		
100	105	110
Asp Ala Gly Val Gln Gly Tyr Val His Pro Arg Pro Ala Gly Ala Gln		
115	120	125
Ser Thr Glu Ala Trp Pro Ser Glu Glu Thr Glu Gly Ser Val Gly His		
130	135	140
His Asp Glu Ser Leu Val Ser Thr Arg Pro Ser Cys Ala Phe Leu Leu		
145	150	155
His Gly Thr Ala Arg Val Gly Val Pro Glu Gly Pro Ser Trp Pro Trp		
165	170	175
Lys Val Pro Tyr Ser Arg Gln Glu		
180		

<210> 3328

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3328

Met Gly Ser Val Phe Leu Gly Lys Ser Gly Leu Leu Cys Lys Ala Pro
 1 5 10 15
 Ala Leu Pro Asp Ser Ser Pro Asn Thr Arg Ala Lys Val Gly Val Leu
 20 25 30
 Phe Leu Pro Leu Leu Pro Pro Asn Asp Leu Glu Gly Ile Cys Val Pro
 35 40 45
 Ala Val Pro Phe Pro Ala Thr Phe Ala Pro Gly Asn Ser Pro Pro His
 50 55 60
 Thr Ser Pro His Leu Ile Gly Asn Phe Pro Leu Pro Asp Leu Arg Ser
 65 70 75 80
 Ile Ser Thr Pro Ser Leu Gln Asn Gly Asp Asn Glu Leu Thr Lys Ser
 85 90 95
 Met Phe Asn Thr Leu Leu Thr Glu Leu Thr Met Ile Leu Gly Gly Ser
 100 105 110
 Gly Met

<210> 3329

<211> 326

<212> PRT

<213> Homo sapiens

<400> 3329

Met Lys Cys Thr Ala Val Leu Cys Cys Arg Met Ala Pro Leu Gln Lys
 1 5 10 15
 Ala Gln Ile Val Arg Met Val Lys Asn Leu Lys Gly Ser Pro Ile Thr
 20 25 30
 Leu Ser Ile Gly Asp Gly Ala Asn Asp Val Ser Met Ile Leu Glu Ser

35	40	45
His Val Gly Ile Gly Ile Lys Gly Lys Glu Gly Arg Gln Ala Ala Arg		
50	55	60
Asn Ser Asp Tyr Ser Val Pro Lys Phe Lys His Leu Lys Lys Leu Leu		
65	70	75
Leu Ala His Gly His Leu Tyr Tyr Val Arg Ile Ala His Leu Val Gln		
85	90	95
Tyr Phe Phe Tyr Lys Asn Leu Cys Phe Ile Leu Pro Gln Phe Leu Tyr		
100	105	110
Gln Phe Phe Cys Gly Phe Ser Gln Gln Pro Leu Tyr Asp Ala Ala Tyr		
115	120	125
Leu Thr Met Tyr Asn Ile Cys Phe Thr Ser Leu Pro Ile Leu Ala Tyr		
130	135	140
Ser Leu Leu Glu Gln His Ile Asn Ile Asp Thr Leu Thr Ser Asp Pro		
145	150	155
Arg Leu Tyr Met Lys Ile Ser Gly Asn Ala Met Leu Gln Leu Gly Pro		
165	170	175
Phe Leu Tyr Trp Thr Phe Leu Ala Ala Phe Glu Gly Thr Val Phe Phe		
180	185	190
Phe Gly Thr Tyr Phe Leu Phe Gln Thr Ala Ser Leu Glu Glu Asn Gly		
195	200	205
Lys Val Tyr Gly Asn Trp Thr Phe Gly Thr Ile Val Phe Thr Val Leu		
210	215	220
Val Phe Thr Val Thr Leu Lys Leu Ala Leu Asp Thr Arg Phe Trp Thr.		
225	230	235
Trp Ile Asn His Phe Val Ile Trp Gly Ser Leu Ala Phe Tyr Val Phe		
245	250	255
Phe Ser Phe Phe Trp Gly Gly Ile Ile Trp Pro Phe Leu Lys Gln Gln		
260	265	270

Arg Met Tyr Phe Val Phe Ala Gln Met Leu Ser Ser Val Ser Thr Trp

275 280 285

Leu Ala Ile Ile Leu Leu Ile Phe Ile Ser Leu Phe Pro Glu Ile Leu

290 295 300

Leu Ile Val Leu Lys Asn Val Arg Arg Arg Ser Ala Arg Val His His

305 310 315 320

Leu Ile Ser Ser Ser Ala

325

<210> 3330

211 <211> 913

<212> PRT

<213> Homo sapiens

<400> 3330

Met Pro Gly Glu Ala Val Glu Tyr His Ser Ile Gln Leu Ile Arg Asp

1 5 10 15

Glu Phe Leu Met Asn Val Gln Lys Phe Ala Ser Asn Ile Gln Arg Thr

20 25 30

Met Gln Gln Leu Glu Gly Glu Ile Lys Leu Glu Met Pro Ile Ile Ser

35 40 45

Val Glu Gly Glu Val Ser Asp Leu Ala Ala Asp Pro Glu Thr Val Asp

50 55 60

Ile Leu Glu Gln Cys Val Ile Asn Trp Leu Asn Gln Ile Ser Thr Ala

65 70 75 80

Val Glu Ala Gln Leu Lys Lys Thr Pro Gln Gly Lys Gly Pro Leu Ala

Glu Ile Glu Phe Trp Arg Glu Arg Asn Ala Thr Leu Ser Ala Leu His

100	105	110
Glu Gln Thr Lys Leu Pro Ile Val Arg Lys Val Leu Asp Val Ile Lys		
115	120	125
Glu Ser Asp Ser Met Leu Val Ala Asn Leu Gln Pro Val Phe Thr Glu		
130	135	140
Leu Phe Lys Phe His Thr Glu Ala Ser Asp Asn Val Arg Phe Leu Ser		
145	150	155
Thr Val Glu Arg Tyr Phe Lys Asn Ile Thr His Gly Ser Gly Phe His		
165	170	175
Val Val Leu Asp Thr Ile Pro Ala Met Met Ser Ala Leu Arg Met Val		
180	185	190
Trp Ile Ile Ser Arg His Tyr Asn Lys Asp Glu Arg Met Ile Pro Leu		
195	200	205
Met Glu Arg Ile Ala Trp Glu Ile Ala Glu Arg Val Cys Arg Val Val		
210	215	220
Asn Leu Arg Thr Leu Phe Lys Glu Asn Arg Ala Ser Ala Gln Ser Lys		
225	230	235
Thr Leu Glu Ala Arg Asn Thr Leu Arg Leu Trp Lys Lys Ala Tyr Phe		
245	250	255
Asp Thr Arg Ala Lys Ile Glu Ala Ser Gly Arg Glu Asp Arg Trp Glu		
260	265	270
Phe Asp Arg Lys Arg Leu Phe Glu Arg Thr Asp Tyr Met Ala Thr Ile		
275	280	285
Cys Gln Asp Leu Ser Asp Val Leu Gln Val Leu Glu Glu Phe Tyr Asn		
290	295	300
Ile Phe Gly Pro Glu Leu Lys Ala Val Thr Gly Asp Pro Lys Arg Ile		
305	310	315
Asp Asp Val Leu Cys Arg Val Asp Gly Leu Val Thr Pro Met Glu Asn		
325	330	335

Leu Thr Phe Asp Pro Phe Ser Ile Lys Ser Ser Gln Phe Trp Lys Tyr
 340 345 350
 Val Met Asp Glu Phe Lys Ile Glu Val Leu Ile Asp Ile Ile Asn Lys
 355 360 365
 Ile Phe Val Gln Asn Leu Glu Asn Pro Pro Leu Tyr Lys Asn His Pro
 370 375 380
 Pro Val Ala Gly Ala Ile Tyr Trp Glu Arg Ser Leu Phe Phe Arg Ile
 385 390 395 400
 Lys His Thr Ile Leu Arg Phe Gln Glu Val Gln Glu Ile Leu Asp Ser
 405 410 415
 Asp Arg Gly Gln Glu Val Lys Gln Lys Tyr Leu Glu Val Gly Arg Thr
 420 425 430
 Met Lys Glu Tyr Glu Asp Arg Lys Tyr Glu Gln Trp Met Glu Val Thr
 435 440 445
 Glu Gln Val Leu Pro Ala Leu Met Lys Lys Ser Leu Leu Thr Lys Ser
 450 455 460
 Ser Ile Ala Thr Glu Glu Pro Ser Thr Leu Glu Arg Gly Ala Val Phe
 465 470 475 480
 Ala Ile Asn Phe Ser Pro Ala Leu Arg Glu Ile Ile Asn Glu Thr Lys
 485 490 495
 Tyr Leu Glu Gln Leu Gly Phe Thr Val Pro Glu Leu Ala Arg Asn Val
 500 505 510
 Ala Leu Gln Glu Asp Lys Phe Leu Arg Tyr Thr Ala Gly Ile Gln Arg
 515 520 525
 Met Leu Asp His Tyr His Met Leu Ile Gly Thr Leu Asn Asp Ala Glu
 530 535 540
 Ser Val Leu Leu Lys Asp His Ser Gln Glu Leu Leu Arg Val Phe Arg
 545 550 555 560
 Ser Gly Tyr Lys Arg Leu Asn Trp Asn Ser Leu Gly Ile Gly Asp Tyr

565	570	575
Ile Thr Gly Cys Lys Gln Ala Ile Gly Lys Phe Glu Ser Leu Val His		
580	585	590
Gln Ile His Lys Asn Ala Asp Asp Ile Ser Ser Arg Leu Thr Leu Ile		
595	600	605
Glu Ala Ile Asn Leu Phe Lys Tyr Pro Ala Ala Lys Ser Glu Glu Glu		
610	615	620
Leu Pro Gly Val Lys Glu Phe Glu His Ile Glu Arg Glu Arg Ala		
625	630	635
Ser Asp Val Asp His Met Val Arg Trp Tyr Leu Ala Ile Gly Pro Leu		
645	650	655
Leu Thr Lys Val Glu Gly Leu Val Val His Thr Asn Thr Gly Lys Ala		
660	665	670
Pro Lys Leu Ala Ser Tyr Tyr Lys Tyr Trp Glu Lys Lys Ile Tyr Glu		
675	680	685
Val Leu Thr Lys Leu Ile Leu Lys Asn Leu Gln Ser Phe Asn Ser Leu		
690	695	700
Ile Leu Gly Asn Val Pro Leu Phe His Thr Glu Thr Ile Leu Thr Ala		
705	710	715
Pro Glu Ile Ile Leu His Pro Asn Thr Asn Glu Ile Asp Lys Met Cys		
725	730	735
Phe His Cys Val Arg Asn Cys Val Glu Ile Thr Lys His Phe Val Arg		
740	745	750
Trp Met Asn Gly Ser Cys Ile Glu Cys Pro Pro Gln Lys Gly Glu Glu		
755	760	765
Glu Glu Val Val Ile Ile Asn Phe Tyr Asn Asp Ile Ser Leu Asn Pro		
770	775	780
Gln Ile Ile Glu Gln Ala Val Met Ile Pro Gln Asn Val His Arg Ile		
785	790	795
		800

Leu Ile Asn Leu Met Lys Tyr Leu Gln Lys Trp Lys Arg Tyr Arg Pro
 805 810 815
 Leu Trp Lys Leu Asp Lys Ala Ile Val Met Glu Lys Phe Ala Ala Lys
 820 825 830
 Lys Pro Pro Cys Val Ala Tyr Asp Glu Lys Leu Gln Phe Tyr Ser Lys
 835 840 845
 Ile Ala Tyr Glu Val Met Arg His Pro Leu Ile Lys Asp Glu His Cys
 850 855 860
 Ile Arg Leu Gln Leu Arg His Leu Ala Asn Thr Val Gln Glu Asn Ala
 865 870 875 880
 Lys Ser Trp Val Ile Ser Leu Gly Lys Leu Leu Asn Glu Ser Ala Lys
 885 890 895
 Glu Glu Leu Tyr Asn Leu His Glu Glu Met Glu Val Leu Asn Arg Cys
 900 905 910
 Val

<210> 3331

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3331

Met Leu Leu Pro Phe Ile Arg Thr Leu Pro Leu Leu Cys Tyr Asn His
 1 5 10 15
 Leu Leu Val Ser Pro Asp Ser Ala Thr Leu Ser Pro Pro Tyr Ser Leu
 20 25 30
 Glu Lys Met Thr Asp Leu Val Ala Val Trp Asp Val Ala Leu Ser Asp

35	40	45
Gly Val His Lys Ile Glu Phe Glu His Gly Thr Thr Ser Gly Lys Arg		
50	55	60
Val Val Tyr Val Asp Gly Lys Glu Glu Ile Arg Lys Glu Trp Met Phe		
65	70	75
Lys Leu Val Gly Lys Glu Thr Phe Tyr Val Gly Ala Ala Lys Thr Lys		
85	90	95
Ala Thr Ile Asn Ile Asp Ala Ile Ser Gly Phe Ala Tyr Glu Tyr Thr		
100	105	110
Leu Glu Ile Asn Gly Lys Ser Leu Lys Lys Tyr Met Glu Asp Arg Ser		
115	120	125
Lys Thr Thr Asn Thr Trp Val Leu His Met Asp Gly Glu Asn Phe Arg		
130	135	140
Ile Val Leu Glu Lys Asp Ala Met Asp Val Trp Cys Asn Gly Lys Lys		
145	150	155
Leu Glu Thr Ala Val Ser		
165		

<210> 3332

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3332

Met	Leu	Trp	Tyr	Glu	Leu	Pro	Gly	Tyr	Leu	Arg	Leu	Pro	Cys	Lys	Gln
1		5						10					15		
Leu Trp Pro Asp Trp Val Pro Gly Arg Gly Gln Gln Thr Lys Glu Cys															
		20						25					30		

Ser Val Gly Pro Ala Ser Ser Asp Leu Gln Asp His Pro Ala Glu Ile
 35 40 45
 Arg Pro Asn Ser Ser Arg Arg Ala Lys Val Ser Tyr Gly Arg Gln Leu
 50 55 60
 Ser Leu Glu Lys Trp Pro Ser Leu Ala Thr Leu Tyr Tyr Arg Cys Ser
 65 70 75 80
 Cys Thr Lys Pro Ser Gly His His Met Ser Trp Leu Ala Ala Leu Ser
 85 90 95
 Leu Cys Leu Ser Ser Gly Gly Cys Ile Ser Glu Arg Cys Arg Ser Ala
 100 105 110
 Ile Thr Gln Cys Ser Gln Pro Arg Met Glu Asp Leu Tyr Phe Trp Pro
 115 120 125
 Ser

<210> 3333

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3333

Met Pro Cys Thr Pro Pro Pro Pro Pro His Ile Arg Leu Ala
 1 5 10 15
 Ala Gly Ser Leu Glu Ala Ala Arg Leu Thr Pro Pro Arg Gly Pro Gly
 20 25 30
 Pro Met Ala Gly Ile Arg Ser Arg Pro Pro Ala Cys Thr Ser Glu Gln
 35 40 45
 Arg Gln Ala Gln Leu Ala Ala Thr His Pro Pro Leu Ala Ala Gly Arg

50	55	60	
Pro Cys Ser Val Ser Trp Ser Phe Pro Arg Pro Cys Gly Pro Leu Thr			
65	70	75	80
Ala Pro Leu Leu Cys Leu His Arg Ser Leu Arg Ala Leu Leu Leu Ala			
85	90	95	
Ser Ala Pro His Thr Ser Ala Ala Trp Cys Arg Thr Leu Gly Arg			
100	105	110	
Tyr Pro Pro Pro			
115			

<210> 3334

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3334

Met Ala Asn Arg Asp Ser Ala Ser Pro His Ser Pro Pro Arg Arg Arg			
1	5	10	15
Arg Cys Leu Gly Gly Pro Thr Val Leu Pro Leu Arg Lys Ile His Ala			
20	25	30	
Gly Cys Tyr Gly Pro Gln Pro Pro His Arg His Pro Arg Pro Leu His			
35	40	45	
Thr Val Ser Leu Pro Ser Pro Asn Thr Leu Leu Pro Gln Pro Gly Asp			
50	55	60	
Pro Trp Met Glu Asp Trp Ala Ser Gln Ser Gly Arg Gln Asp Gln Arg			
65	70	75	80
Val Cys Glu His Thr Cys Val Pro Ala Asp Met Pro Gln Asp Pro Arg			
85	90	95	

Asp Ala Pro Ala Pro Val Thr Trp Cys Gln Ser Tyr Leu Gly Asn Trp
 100 105 110
 Pro Phe Trp Phe Arg Val Asn Trp Glu Val Lys Pro Leu Gly Phe Val
 115 120 125
 Glu Lys Arg Thr Val Arg Glu Met Leu Cys His Leu Val Arg Lys Thr
 130 135 140
 Phe Phe Leu Ser Ser Lys Ile Met Met Gly Phe Phe Trp Ile Cys Phe
 145 150 155 160
 Thr Asn Lys Ser Asp Trp Ser Ile
 165

<210> 3335

<211> 343

<212> PRT

<213> Homo sapiens

<400> 3335

Met Val Thr Gly Arg Arg Glu Asp Val Ala Thr Ala Arg Arg Glu Ile
 1 5 10 15
 Ile Ser Ala Ala Glu His Phe Ser Met Ile Arg Ala Ser Arg Asn Lys
 20 25 30
 Ser Gly Ala Ala Phe Gly Val Ala Pro Ala Leu Pro Gly Gln Val Thr
 35 40 45
 Ile Arg Val Arg Val Pro Tyr Arg Val Val Gly Leu Val Val Gly Pro
 50 55 60
 Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln Gln Thr Asn Thr Tyr Ile
 65 70 75 80
 Ile Thr Pro Ser Arg Asp Arg Asp Pro Val Phe Glu Ile Thr Gly Ala

85	90	95
Pro Gly Asn Val Glu Arg Ala Arg Glu Glu Ile Glu Thr His Ile Ala		
100	105	110
Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn Asn Glu Asn Asp Phe Leu		
115	120	125
Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser Arg Tyr Ser Asp Ala Trp		
130	135	140
Arg Val His Gln Pro Gly Cys Lys Pro Leu Ser Thr Phe Arg Gln Asn		
145	150	155
Ser Leu Gly Cys Ile Gly Glu Cys Gly Val Asp Ser Gly Phe Glu Ala		
165	170	175
Pro Arg Leu Gly Glu Gln Gly Asp Phe Gly Tyr Gly Tyr Leu		
180	185	190
Phe Pro Gly Tyr Gly Val Gly Lys Gln Asp Val Tyr Tyr Gly Val Ala		
195	200	205
Glu Thr Ser Pro Pro Leu Trp Ala Gly Gln Glu Asn Ala Thr Pro Thr		
210	215	220
Ser Val Leu Phe Ser Ser Ala Ser Ser Ser Ser Ser Ala Lys		
225	230	235
Ala Arg Ala Gly Pro Pro Gly Ala His Arg Ser Pro Ala Thr Ser Ala		
245	250	255
Gly Pro Glu Leu Ala Gly Leu Pro Arg Arg Pro Pro Gly Glu Pro Leu		
260	265	270
Gln Gly Phe Ser Lys Leu Gly Gly Gly Leu Arg Ser Pro Gly Gly		
275	280	285
Gly Arg Asp Cys Met Val Cys Phe Glu Ser Glu Val Thr Ala Ala Leu		
290	295	300
Val Pro Cys Gly His Asn Leu Phe Cys Met Glu Cys Ala Val Arg Ile		
305	310	315
320		

Cys Glu Arg Thr Asp Pro Glu Cys Pro Val Cys His Ile Thr Ala Thr
 325 330 335

Gln Ala Ile Arg Ile Phe Ser
 340

<210> 3336

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3336

Met Asp Ala Ala Val Thr Asp Asp Phe Gln Gln Ile Leu Pro Ile Glu
 1 5 10 15

Gln Leu Arg Ser Thr His Ala Ser Asn Asp Tyr Val Glu Arg Pro Pro
 20 25 30

Ala Pro Cys Lys Gln Ala Leu Ser Ser Pro Ser Leu Ile Val Gln Thr
 35 40 45

His Lys Ser Asp Trp Ser Leu Ala Thr Met Pro Thr Ser Leu Pro Arg
 50 55 60

Ser Leu Ser Gln Cys His Gln Leu Gln Pro Leu Pro Gln His Leu Ser
 65 70 75 80

Gln Ser Ser Ile Ala Ser Ser Met Ser His Ser Thr Thr Ala Ser Ser
 85 90 95

Thr Thr Ala Pro Leu Met Met Lys Thr Thr Val Leu Met Ser Pro Ala
 100 105 110

Leu Val Gly Leu Val Leu Ala Leu Ser Ala Gly Gln Pro
 115 120 125

<210> 3337

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3337

Met	Cys	Val	Tyr	Thr	Tyr	Ile	Cys	Glu	Tyr	Arg	Cys	Ile	Tyr	Val	Cys
1															15
Ile	Tyr	Ile	His	Val	Phe	Val	Tyr	Val	Cys	Tyr	Ile	Tyr	Leu	Tyr	Val
20							25							30	
Tyr	Val	Cys	Val	Ile	Tyr	Ile	His	Val	Cys	Val	Cys	Val	Cys	Val	Leu
35					40						45				
Tyr	Ile	His	Val	Cys	Val	Tyr	Val	Cys	Val	Tyr	Ala	Leu	Arg	Arg	Gln
50				55						60					
Asn	Cys	Pro	Glu	Glu	Gly	Trp	Tyr	Leu	Gly	Phe	Pro	Ser	Pro	Ser	Leu
65				70				75					80		
Cys	His	Leu	Val	Pro	Asn	Arg	Ala	Asn	Gly	Pro	Ser	Leu	Gln	Thr	Glu
85					90							95			
Ala	Glu	Ser	Pro	Gly	Leu	Gly	Arg	Gly	Asp	Arg	Gly	Thr	Gly	Gln	Pro
100					105						110				
Gln	Trp	Gly	Thr	Gly	Asp	Pro	Gly	Leu	His	Pro	Asn	Thr	Gly	Thr	Arg
115				120						125					
Asp	Arg	Cys	His	Glu	Leu	Leu	Leu	Glu	Pro	Ser	Ala	Gln	Gly	Ser	
130			135					140							
Gly	Leu	Tyr	Pro												
145															

<210> 3338

<211> 172

<212> PRT

<213> Homo sapiens

<400> 3338

Met Asn Ala Val Gly Cys Cys Gly Leu Gln Leu Tyr Lys Phe Gly Glu

1

5

10

15

Thr Val Ser Ile Val Phe Trp Thr Asp Thr Trp Arg Pro Glu Ser Phe

20

25

30

Phe Asp Lys Val Lys Lys Asn Arg Gln Asn Gly Met His Thr Leu Cys

35

40

45

Leu Leu Asp Ile Lys Val Lys Glu Gln Ser Leu Glu Asn Leu Ile Lys

50

55

60

Gly Arg Lys Ile Tyr Glu Pro Pro Arg Tyr Met Ser Val Asn Gln Ala

65

70

75

80

Ala Gln Gln Leu Leu Glu Ile Val Gln Asn Gln Arg Ile Arg Gly Glu

85

90

95

Glu Pro Ala Val Thr Glu Glu Thr Leu Cys Val Gly Leu Ala Arg Val

100

105

110

Gly Ala Asp Asp Gln Lys Ile Ala Ala Gly Thr Leu Arg Gln Met Cys

115

120

125

Thr Val Asp Leu Gly Glu Pro Leu His Ser Leu Ile Ile Thr Gly Gly

130

135

140

Ser Ile His Pro Met Glu Met Glu Met Leu Ser Leu Phe Ser Ile Pro

145

150

155

160

Glu Asn Ser Ser Glu Ser Gln Ser Ile Asn Gly Leu

165

170

<210> 3339

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3339

Met His Leu Thr Ser Pro Pro Val Leu Arg Thr Pro Cys Cys Ser Gly

1 5 10 15

His Arg Val Ser Gln Gln Trp His Ile Asp Thr Trp Ala Arg Glu Phe

20 25 30

Phe Ala Ala Gly Gly Gly Gly Pro Val Cys Cys Arg Leu Leu Cys

35 40 45

Gly Ser Phe Ser Leu Cys Pro Leu Ile Glu Ala Pro Leu Pro Trp Leu

50 55 60

Gln Pro Lys Met Ser Pro Asp Ile Ala Lys Cys Pro Gly Ala Gly Ala

65 70 75 80

Arg Gly Thr Met Ser Pro Leu Thr His Leu Glu Asn His Cys Tyr Lys

85 90 95

Arg Thr Gly Thr Ala Lys Glu Ala Ile Ile Ser Arg Lys Ser Cys Cys

100 105 110

Arg Phe Ser Leu Asn Lys Gly Val Ser Ile Leu Arg Asn Pro Pro Lys

115 120 125

Asp Cys Trp Pro Ser Leu Ser

130 135

<210> 3340

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3340

Met Phe Ser Ile Thr Leu Ile Asn His Phe Asp Leu Ser Ile Leu Ile

1 5 10 15

Thr Thr Met Val Leu Val Pro Ser Tyr Thr Leu Leu Gly Phe Lys Thr

20 25 30

Phe Leu Glu Val Arg Asp Gln Glu His Tyr Arg Glu Phe Pro Glu Ala

35 40 45

Asn Phe Glu Leu Ser Ala Thr Asp Phe Leu Val Cys Phe Ile Pro Tyr

50 55 60

Phe Gln Thr Leu Leu Phe Val Phe Val Leu Arg Cys Met Glu Leu Lys

65 70 75 80

Cys Gly Lys Lys Arg Met Arg Lys Asp Pro Val Phe Arg Ile Ser Pro

85 90 95

Gln Ser Arg Asp Ala Lys Pro Asn Pro Glu Glu Pro Ile Asp Glu Asp

100 105 110

Glu Asp Ile Gln Thr Glu Arg Ile Arg Thr Ala Thr Ala Leu Thr Thr

115 120 125

Ser Ile Leu Asp Glu Lys Pro Val Ile Ile Ala Ser Cys Leu His Lys

130 135 140

Glu Tyr Ala Gly Gln Lys Lys Ser Cys Phe Ser Lys Arg Lys Lys

145 150 155 160

Ile Ala Ala Arg Asn Ile Ser Phe Cys Val Gln Glu Gly Glu Ile Leu

165 170 175

Gly Leu Leu Gly Pro Asn Gly Ala Gly Lys Ser Ser Ser Ile Arg Met

180 185 190

Ile Ser Gly Ile Thr Lys Pro Thr Ala Gly Glu Val Glu Leu Lys Gly

195	200	205
Cys Ser Ser Val Leu Gly His Leu Gly Tyr Cys Pro Gln Glu Asn Val		
210	215	220
Leu Trp Pro Met Leu Thr Leu Arg Glu His Leu Glu Val Tyr Ala Ala		
225	230	235
Val Lys Gly Leu Arg Lys Ala Asp Ala Arg Leu Ala Ile Ala Arg Leu		
245	250	255
Val Ser Ala Phe Lys Leu His Glu Gln Leu Asn Val Pro Val Gln Lys		
260	265	270
Leu Thr Ala Gly Ile Thr Arg Lys Leu Cys Phe Val Leu Ser Leu Leu		
275	280	285
Gly Asn Ser Pro Val Leu Leu Asp Glu Pro Ser Thr Gly Ile Asp		
290	295	300
Pro Thr Gly Gln Gln Gln Met Trp Gln Ala Ile Gln Ala Val Val Lys		
305	310	315
Asn Thr Glu Arg Gly Val Leu Leu Thr Thr His Asn Leu Ala Glu Ala		
325	330	335
Glu Ala Leu Cys Asp Arg Val Ala Ile Met Val Ser Gly Arg Leu Arg		
340	345	350
Cys Ile Gly Ser Ile Gln His Leu Lys Asn Lys Leu Gly Lys Asp Tyr		
355	360	365
Ile Leu Glu Leu Lys Val Lys Glu Thr Ser Gln Val Thr Leu Val His		
370	375	380
Thr Glu Ile Leu Lys Leu Phe Pro Gln Ala Ala Gly Gln Glu Arg Tyr		
385	390	395
Ser Ser Leu Leu Thr Tyr Lys Leu Pro Val Ala Asp Val Tyr Pro Leu		
405	410	415
Ser Gln Thr Phe His Lys Leu Glu Ala Val Lys His Asn Phe Asn Leu		
420	425	430

Gly Glu Tyr Ser Leu Ser Gln Cys Thr Leu Glu Lys Val Phe Leu Glu
 435 440 445
 Leu Ser Lys Glu Gln Glu Val Gly Asn Phe Asp Glu Glu Ile Asp Thr
 450 455 460
 Thr Met Arg Trp Lys Leu Leu Pro His Ser Asp Glu Pro
 465 470 475

<210> 3341

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3341

Met Gly Asn Pro Ile Leu Gln Gln His Tyr Ile Arg Glu Ala Thr Met
 1 5 10 15

Glu Gln Gly Thr Arg Pro Lys Lys Pro Pro Cys Ala Tyr Ser Thr Val
 20 25 30

His Arg Val Pro Ser Ala Pro Glu Gly Pro Cys Pro Pro Thr Ser Thr
 35 40 45

Ala Pro Ser Ser Gly Pro Pro Arg Ala Leu Gly Arg Phe Leu Cys Gln
 50 55 60

Thr Ser Pro Ala Thr His Ser Ser Gly Ser Arg Ala Pro Pro Pro Gln
 65 70 75 80

Gln Gln Ser Ser Arg Asp Leu Pro Gln Gly Arg Ser Pro Ala Pro Gly
 85 90 95

Trp Lys Ala Ala Glu Leu Trp Arg Arg Gly Thr Gln Arg Thr Ala Gly
 100 105 110

Arg Ala Cys Pro Arg Leu Pro Ala Arg Pro Glu Gly Ser Ala Arg Ser

115	120	125
Lys Asn Gln Lys Ser Ser Met Arg Ser Pro Ala Gly Arg Arg Gly Val		
130	135	140
Ala Gln Pro Val Leu Ile Leu Ser Trp Arg Lys Pro Ser Gly Arg Val		
145	150	155
Leu Gly Arg Thr Arg Leu Pro Pro Arg Leu Leu Ser Ala Ala Cys Pro		
165	170	175
Ala Arg Thr Ser Val		
180		

<210> 3342

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3342

Met Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser		
1	5	10
Ser Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met		
20	25	30
Ser His Cys Ala Trp Thr Ile Phe Thr Phe Phe Glu Thr Glu Ser		
35	40	45
Cys Ser Val Thr Gln Thr Glu Val Gln Trp Arg Arg Leu Gly Ser Leu		
50	55	60
Gln Ala Pro Leu Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu Pro		
65	70	75
Asn Ser Trp Asp Tyr Arg Arg Pro Pro Phe Leu Ala Asn Phe Phe		
85	90	95

Val Phe Leu Val Ala Met Gly Phe His His Val Ser Gln Asp Gly Leu
 100 105 110
 Asp Ile Leu Thr Ser
 115

<210> 3343

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3343

Met Cys His His Ala Trp Leu Ile Phe Ile Phe Leu Val Glu Thr Gly
 1 5 10 15

Phe His His Val Val Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp
 20 25 30

Leu Pro Thr Ser Ala Ser Gln Gly Ala Gly Ile Thr Gly Met Ser His
 35 40 45

His Ala Trp Pro Phe Leu Thr Leu Leu Tyr Asp Met Pro Ile Ala Ser
 50 55 60

Leu Arg Ala Ser Val Pro Cys Tyr Phe Thr Leu Gly Phe Arg Trp Arg
 65 70 75 80

Glu Gln Leu Leu Phe Gly Thr Leu Ala Ile Ala Trp Gln Met Gly Ile
 85 90 95

Cys His Phe Cys Ser Tyr Leu Val Gly Ser Thr Ile Thr Phe Arg Ala
 100 105 110

Asn Pro Ala Ala Lys Pro Gly Ile Asn Arg Ala Glu Lys Tyr Ile Leu
 115 120 125

<210> 3344

<211> 752

<212> PRT

<213> Homo sapiens

<400> 3344

Met Glu Thr Val Val Ala Gly Gly Ser Gly Gly Asp Gly Glu Glu Glu
1 5 10 15
Glu Glu Ala Leu Pro Glu Gln Ser Glu Gly Lys Glu Gln Lys Ile Leu
20 25 30
Leu Asp Thr Ala Cys Lys Met Val Arg Trp Leu Ser Ala Lys Leu Gly
35 40 45
Pro Thr Val Ala Ser Arg His Val Ala Arg Asn Leu Leu Arg Leu Leu
50 55 60
Thr Ser Cys Tyr Val Gly Pro Thr Arg Gln Gln Phe Thr Val Ser Ser
65 70 75 80
Gly Glu Ser Pro Pro Leu Ser Ala Gly Asn Ile Tyr Gln Lys Arg Pro
85 90 95
Val Leu Gly Asp Ile Val Ser Gly Pro Val Leu Ser Cys Leu Leu His
100 105 110
Ile Ala Arg Leu Tyr Gly Glu Pro Val Leu Thr Tyr Gln Tyr Leu Pro
115 120 125
Tyr Ile Ser Tyr Leu Val Ala Pro Gly Ser Ala Ser Gly Pro Ser Arg
130 135 140
Leu Asn Ser Arg Lys Glu Ala Gly Leu Leu Ala Ala Val Thr Leu Thr
145 150 155 160
Gln Lys Ile Ile Val Tyr Leu Ser Asp Thr Thr Leu Met Asp Ile Leu
165 170 175

Pro Arg Ile Ser His Glu Val Leu Leu Pro Val Leu Ser Phe Leu Thr
 180 185 190
 Ser Leu Val Thr Gly Phe Pro Ser Gly Ala Gln Ala Arg Thr Ile Leu
 195 200 205
 Cys Val Lys Thr Ile Ser Leu Ile Ala Leu Ile Cys Leu Arg Ile Gly
 210 215 220
 Gln Glu Met Val Gln Gln His Leu Ser Glu Pro Val Ala Thr Phe Phe
 225 230 235 240
 Gln Val Phe Ser Gln Leu His Glu Leu Arg Gln Gln Asp Leu Lys Leu
 245 250 255
 Asp Pro Ala Gly Arg Gly Glu Gly Gln Leu Pro Gln Val Val Phe Ser
 260 265 270
 Asp Gly Gln Gln Arg Pro Val Asp Pro Ala Leu Leu Asp Glu Leu Gln
 275 280 285
 Lys Val Phe Thr Leu Glu Met Ala Tyr Thr Ile Tyr Val Pro Phe Ser
 290 295 300
 Cys Leu Leu Gly Asp Ile Ile Arg Lys Ile Ile Pro Asn His Glu Leu
 305 310 315 320
 Val Gly Glu Leu Ala Ala Leu Tyr Leu Glu Ser Ile Ser Pro Ser Ser
 325 330 335
 Arg Asn Pro Ala Ser Val Glu Pro Thr Met Pro Gly Thr Gly Pro Glu
 340 345 350
 Trp Asp Pro His Gly Gly Cys Pro Gln Asp Asp Gly His Ser Gly
 355 360 365
 Thr Phe Gly Ser Val Leu Val Gly Asn Arg Ile Gln Ile Pro Asn Gly
 370 375 380
 Ser Arg Pro Glu Asn Pro Gly Pro Leu Gly Pro Ile Ser Gly Val Gly
 385 390 395 400
 Gly Gly Gly Leu Gly Ser Gly Ser Asp Asp Asn Ala Leu Lys Gln Glu

405	410	415
Leu Pro Arg Ser Val His Gly Leu Ser Gly Asn Trp Leu Ala Tyr Trp		
420	425	430
Gln Tyr Glu Ile Gly Val Ser Gln Gln Asp Ala His Phe His His		
435	440	445
Gln Ile Arg Leu Gln Ser Phe Pro Gly His Ser Gly Ala Val Lys Cys		
450	455	460
Val Ala Pro Leu Ser Ser Glu Asp Phe Phe Leu Ser Gly Ser Lys Asp		
465	470	475
Arg Thr Val Arg Leu Trp Pro Leu Tyr Asn Tyr Gly Asp Gly Thr Ser		
485	490	495
Glu Thr Ala Pro Arg Leu Val Tyr Thr Gln His Arg Lys Ser Val Phe		
500	505	510
Phe Val Gly Gln Leu Glu Ala Pro Gln His Val Val Ser Cys Asp Gly		
515	520	525
Ala Val His Val Trp Asp Pro Phe Thr Gly Lys Thr Leu Arg Thr Val		
530	535	540
Glu Pro Leu Asp Ser Arg Val Pro Leu Thr Ala Val Ala Val Met Pro		
545	550	555
Ala Pro His Thr Ser Ile Thr Met Ala Ser Ser Asp Ser Thr Leu Arg		
565	570	575
Phe Val Asp Cys Arg Lys Pro Gly Leu Gln His Glu Phe Arg Leu Gly		
580	585	590
Gly Gly Leu Asn Pro Gly Leu Val Arg Ala Leu Ala Ile Ser Pro Ser		
595	600	605
Gly Arg Ser Val Val Ala Gly Phe Ser Ser Gly Phe Met Val Leu Leu		
610	615	620
Asp Thr Arg Thr Gly Leu Val Leu Arg Gly Trp Pro Ala His Glu Gly		
625	630	635
640		

Asp Ile Leu Gln Ile Lys Ala Val Glu Gly Ser Val Leu Val Ser Ser
 645 650 655
 Ser Ser Asp His Ser Leu Thr Val Trp Lys Glu Leu Glu Gln Lys Pro
 660 665 670
 Thr His His Tyr Lys Ser Ala Ser Asp Pro Ile His Thr Phe Asp Leu
 675 680 685
 Tyr Gly Ser Glu Val Val Thr Gly Thr Val Ser Asn Lys Ile Gly Val
 690 695 700
 Cys Ser Leu Leu Glu Pro Pro Ser Gln Ala Thr Thr Lys Leu Ser Ser
 705 710 715 720
 Glu Asn Phe Arg Gly Thr Leu Thr Ser Leu Ala Leu Leu Pro Thr Lys
 725 730 735
 Arg His Leu Leu Leu Gly Ser Asp Asn Gly Val Ile Arg Leu Leu Ala
 740 745 750

<210> 3345

<211> 805

<212> PRT

<213> Homo sapiens

<400> 3345

Met Ala Arg Leu His Glu His Leu Lys Tyr Phe Val Asn Met Lys Ile
 1 5 10 15

Ser Thr Asp Lys Ser Trp Gln Gly Val Thr Ile Tyr Phe Ser Gly His
 20 25 30

Glu Thr Pro Gly Glu Gly Glu His Lys Ile Met Glu Phe Ile Arg Ser
 35 40 45

Glu Lys Ala Lys Pro Asp His Asp Pro Asn Thr Arg His Cys Leu Tyr

50	55	60
Gly Leu Asp Ala Asp Leu Ile Met Leu Gly Leu Thr Ser His Glu Ala		
65	70	75
His Phe Ser Leu Leu Arg Glu Glu Val Arg Phe Gly Gly Lys Lys Thr		80
85	90	95
Gln Arg Val Cys Ala Pro Glu Glu Thr Thr Phe His Leu Leu His Leu		
100	105	110
Ser Leu Met Arg Glu Tyr Ile Asp Tyr Glu Phe Ser Val Leu Lys Glu		
115	120	125
Lys Ile Thr Phe Lys Tyr Asp Ile Glu Arg Ile Ile Asp Asp Trp Ile		
130	135	140
Leu Met Gly Phe Leu Val Gly Asn Asp Phe Ile Pro His Leu Pro His		
145	150	155
Leu His Ile Asn His Asp Ala Leu Pro Leu Leu Tyr Gly Thr Tyr Val		160
165	170	175
Thr Ile Leu Pro Glu Leu Gly Tyr Ile Asn Glu Ser Gly His Leu		
180	185	190
Asn Leu Pro Arg Phe Glu Lys Tyr Leu Val Lys Leu Ser Asp Phe Asp		
195	200	205
Arg Glu His Phe Ser Glu Val Phe Val Asp Leu Lys Trp Phe Glu Ser		
210	215	220
Lys Val Gly Asn Lys Tyr Leu Asn Glu Ala Ala Gly Val Ala Ala Glu		
225	230	235
Glu Ala Arg Asn Tyr Lys Glu Lys Lys Leu Lys Gly Gln Glu Asn		240
245	250	255
Ser Leu Cys Trp Thr Ala Leu Asp Lys Asn Glu Gly Glu Met Ile Thr		
260	265	270
Ser Lys Asp Asn Leu Glu Asp Glu Thr Glu Asp Asp Leu Phe Glu		
275	280	285

Thr Glu Phe Arg Gln Tyr Lys Arg Thr Tyr Tyr Met Thr Lys Met Gly
 290 295 300
 Val Asp Val Val Ser Asp Asp Phe Leu Ala Asp Gln Ala Ala Cys Tyr
 305 310 315 320
 Val Gln Ala Ile Gln Trp Ile Leu His Tyr Tyr Tyr His Gly Val Gln
 325 330 335
 Ser Trp Ser Trp Tyr Tyr Pro Tyr His Tyr Ala Pro Phe Leu Ser Asp
 340 345 350
 Ile His Asn Ile Ser Thr Leu Lys Ile His Phe Glu Leu Gly Lys Pro
 355 360 365
 Phe Lys Pro Phe Glu Gln Leu Leu Ala Val Leu Pro Ala Ala Ser Lys
 370 375 380
 Asn Leu Leu Pro Ala Cys Tyr Gln His Leu Met Thr Asn Glu Asp Ser
 385 390 395 400
 Pro Ile Ile Glu Tyr Tyr Pro Pro Asp Phe Lys Thr Asp Leu Asn Gly
 405 410 415
 Lys Gln Gln Glu Trp Glu Ala Val Val Leu Ile Pro Phe Ile Asp Glu
 420 425 430
 Lys Arg Leu Leu Glu Ala Met Glu Thr Cys Asn His Ser Leu Lys Lys
 435 440 445
 Glu Glu Arg Lys Arg Asn Gln His Ser Glu Cys Leu Met Cys Trp Tyr
 450 455 460
 Asp Arg Asp Thr Glu Phe Ile Tyr Pro Ser Pro Trp Pro Glu Lys Phe
 465 470 475 480
 Pro Ala Ile Glu Arg Cys Cys Thr Arg Tyr Lys Ile Ile Ser Leu Asp
 485 490 495
 Ala Trp Arg Val Asp Ile Asn Lys Asn Lys Ile Thr Arg Ile Asp Gln
 500 505 510
 Lys Ala Leu Tyr Phe Cys Gly Phe Pro Thr Leu Lys His Ile Arg His

515	520	525
Lys Phe Phe Leu Lys Lys Ser Gly Val Gln Val Phe Gln Gln Ser Ser		
530	535	540
Arg Gly Glu Asn Met Met Leu Glu Ile Leu Val Asp Ala Glu Ser Asp		
545	550	555
Glu Leu Thr Val Glu Asn Val Ala Ser Ser Val Leu Gly Lys Ser Val		
565	570	575
Phe Val Asn Trp Pro His Leu Glu Glu Ala Arg Val Val Ala Val Ser		
580	585	590
Asp Gly Glu Thr Lys Phe Tyr Leu Glu Glu Pro Pro Gly Thr Gln Lys		
595	600	605
Leu Tyr Ser Gly Arg Thr Ala Pro Pro Ser Lys Val Val His Leu Gly		
610	615	620
Asp Lys Glu Gln Ser Asn Trp Ala Lys Glu Val Gln Gly Ile Ser Glu		
625	630	635
His Tyr Leu Arg Arg Lys Gly Ile Ile Ile Asn Glu Thr Ser Ala Val		
645	650	655
Val Tyr Ala Gln Leu Leu Thr Gly Arg Lys Tyr Gln Ile Asn Gln Asn		
660	665	670
Gly Glu Val Arg Leu Glu Lys Gln Trp Ser Lys Gln Val Val Pro Phe		
675	680	685
Val Tyr Gln Thr Ile Val Lys Asp Ile Arg Ala Phe Asp Ser Arg Phe		
690	695	700
Ser Asn Ile Lys Thr Leu Asp Asp Leu Phe Pro Leu Arg Ser Met Val		
705	710	715
Phe Met Leu Gly Thr Pro Tyr Tyr Gly Cys Thr Gly Glu Val Gln Asp		
725	730	735
Ser Gly Asp Val Ile Thr Glu Gly Arg Ile Arg Val Ile Phe Ser Ile		
740	745	750

Pro Cys Glu Pro Asn Leu Asp Ala Leu Ile Gln Asn Gln His Lys Tyr
 755 760 765
 Ser Ile Lys Tyr Asn Pro Gly Tyr Val Leu Ala Ser Arg Leu Gly Val
 770 775 780
 Ser Gly Tyr Leu Val Ser Arg Phe Thr Gly Ser Ile Phe Ile Gly Arg
 785 790 795 800
 Gly Ser Arg Arg Lys
 805

<210> 3346

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3346

Met Tyr Val Val Phe Tyr Ala Asp Arg Ile Ile Gln Lys Asn Ala Leu
 1 5 10 15

Lys Ser Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Cys Asp Pro
 20 25 30

Gly Ser Leu Gln Pro Leu Pro Pro Gly Leu Lys Arg Phe Ser Cys Leu
 35 40 45

Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg Ile Pro Trp Glu His Pro
 50 55 60

Pro Ala Glu Ile Cys Thr Ser Ala Thr Ile Leu Ser Gly Arg Arg Lys
 65 70 75 80

Gly Lys Gly Ser Ala Ala Ser Leu Ala Thr Ala Cys Ile Ile Ser Ser
 85 90 95

Gln Arg Arg Ser Thr Gly Ser Gly Ser Phe Arg Ala

100

105

<210> 3347

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3347

Met Pro Val Ile Pro Ala Thr Arg Glu Ala Glu Ala Arg Glu Ser Leu

1

5

10

15

Asp Ser Lys His Ser Phe Ile His Ile Pro Ile His Pro Tyr Thr Tyr

20

25

30

Ser Ser Asn Ser Cys Ser Ser Lys His Pro Ser Ile His Pro Ser Ile

35

40

45

His Pro Ser Ile His Pro Ser Ile Tyr Thr Ser Ile Tyr Pro Phe Met

50

55

60

His Leu Tyr Ile Tyr Leu Leu Ile Lys Phe Leu Ser Ile His Pro Ser

65

70

75

80

Thr Tyr Leu Ser Asn Phe Cys Ser Ser Lys His Pro Pro Ile His Leu

85

90

95

Ser Thr His Pro Ser Ile His Ala Cys Met His Pro Ser Ile His Thr

100

105

110

Tyr Ile His Ser Leu Ile Arg Leu Tyr Thr His Pro Ser Met Tyr Leu

115

120

125

Phe Ile

130

<210> 3348

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3348

Met Ser Lys Leu Ala Val Leu Thr Arg Thr Leu Glu Gly Met Ala Met

1

5

10

15

Glu His Arg Leu Glu Met Val Arg Phe Ile Phe Thr Ser Pro Ala Pro

20

25

30

Leu Asp Lys Val Leu Gly Met Val Arg Ala Tyr Lys Glu Thr Gln Thr

35

40

45

Ala Ile Asn Ile Ser Leu Tyr Asp Ala Met Pro Trp Arg Pro Asn Pro

50

55

60

Pro Leu Leu Phe Phe Phe Leu Thr Gly Ser His Phe Val Thr

65

70

75

80

Gln Ala Gly Val Glu Trp Gly Asp Leu Gly Ser Leu Gln Pro Pro Gln

85

90

95

Pro Pro Gly Leu Lys Pro Ser Ser Cys Leu Ser Pro Pro Ser Ser Trp

100

105

110

Asp Tyr Arg His Ala Pro Ser Cys Leu Ala Ser Phe Phe Phe Phe

115

120

125

Glu Thr Glu Ser Cys Ser Leu Pro Gln Ala Arg Val Gln Trp His Asp

130

135

140

Leu Gly Ser Leu Gln Ala Pro Pro Pro

145

150

<210> 3349

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3349

Met Glu Ile Asp Gly Phe Gln Gln Leu Asp Leu Glu Lys Ser Val Pro
1 5 10 15
Ser Lys Lys Thr Thr Pro Lys Arg Ile Ile His Phe Val Asp Gly Asp
20 25 30
Ile Met Glu Glu Tyr Ser Thr Glu Glu Glu Glu Glu Lys Glu
35 40 45
Glu Gln Ser Thr Asn Ser Thr Leu Asp Pro Ser Lys Leu Ser Trp Gly
50 55 60
Pro Tyr Leu Arg Phe Trp Ala Gly Arg Ile Ala Ser Thr Ser Phe Ser
65 70 75 80
Met Leu Ser Leu Gln Ala Thr Leu Leu Leu Lys Ala Glu Lys Glu Gly
85 90 95
Leu Lys Gln Leu Leu Arg Ser Leu Ser Gly Cys Met Glu Glu Phe Leu
100 105 110
Met Trp Val Leu Val Thr Leu Asp
115 120

<210> 3350

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3350

Met Glu Thr Leu Val Val Trp Lys Ile Gln Glu Thr Ser Ile Leu Thr
 1 5 10 15
 Ile Ile Lys Ile His Met Gly Cys Ala Gln Trp Leu Ser Pro Val Ile
 20 25 30
 Pro Ala Phe Trp Glu Ala Gly Val Gly Gly Leu Leu Glu Ala Arg Tyr
 35 40 45
 Ser Arg Pro Ala Trp Gln Pro Gly Glu Ile Pro Cys Ile Gln Lys Ile
 50 55 60
 Glu Lys Leu Ala Arg Asp Asp Gly Val Arg Leu Trp Ser Gln Leu Leu
 65 70 75 80
 Gly Arg Leu Arg Trp Glu Asp Cys Leu Ser Leu Gly Gly Arg Gly Cys
 85 90 95
 Ser Glu Trp Arg Leu Arg His Trp Thr Pro Ala Trp Ala Thr Val Arg
 100 105 110
 Pro Cys Leu Lys Lys Leu Ile Met
 115 120

<210> 3351

<211> 862

<212> PRT

<213> Homo sapiens

<400> 3351

Met Trp Gln Leu Leu Pro Val Glu Gln Asp Thr Ser Asn Val Thr Glu
 1 5 10 15
 Met Lys Val Ser Glu Lys Ser His Asn Ala Phe Lys Ala Thr Asn Lys
 20 25 30
 Lys Arg Glu Thr Asp Val His Leu Lys Ser Gln Asp Phe Leu Met Lys

35	40	45
Thr Asn Thr Ser Thr Gly Leu Lys Met Ala Met Glu Arg Ser Leu Asn		
50	55	60
Pro Ile Asn Phe Asn Pro Glu Asn Asn Val Lys Glu Ser Glu Cys Pro		
65	70	75
Leu Pro Pro Pro Ser Pro Pro Pro Pro Pro Ser Asn Ala Ser Ser		
85	90	95
Glu Ile Glu Phe Pro Leu Pro Pro Pro Pro Leu Met Met Phe Pro		
100	105	110
Glu Lys Asn Gly Phe Leu Pro Ser Leu Ser Thr Glu Lys Ile Lys Ala		
115	120	125
Glu Phe Glu Ser Phe Pro Gly Leu Pro Leu Pro Pro Pro Val Asp		
130	135	140
Glu Lys Ser Glu Arg Glu Ser Ser Ser Met Phe Leu Pro Pro Pro Pro		
145	150	155
Pro Pro Thr Pro Ser Gln Lys Pro Ala His Leu Leu Ser Ser Ala		
165	170	175
Pro Glu Lys His Ser Gly Asp Phe Met Gln Gln Tyr Ser Gln Lys Glu		
180	185	190
Ala Ser Asn Ser Gln Asn Ser Gln Ala Lys Ile Ile Thr Gly Lys Thr		
195	200	205
Gly Val Leu Pro Pro Pro Thr Leu Pro Lys Pro Lys Leu Pro Lys His		
210	215	220
Ile Lys Asp Asn Lys Asn Asp Phe Ser Pro Lys Val Glu Leu Ala Thr		
225	230	235
Ser Leu Ser Asp Met Glu Cys Lys Ile Thr Thr Ser Lys Asp Gln Lys		
245	250	255
Lys Val Met Val Met Thr Ser Ser Glu His Thr Glu Thr Lys Gln Asn		
260	265	270

Val Ile Ser Lys Ser Leu Asp Glu Arg Lys Gln Leu Ser Ile Asp Ser
 275 280 285
 Ala Asn Cys Leu Ser His Thr Val Pro Gly Thr Ser Ala Pro Arg Lys
 290 295 300
 Lys Gln Ile Ala Pro Leu Ile Lys Ser His Ser Phe Pro Glu Ser Ser
 305 310 315 320
 Gly Gln Gln Asn Pro Lys Pro Tyr Met Arg Lys Phe Lys Thr Pro Leu
 325 330 335
 Met Ile Ala Glu Glu Lys Tyr Arg Gln Gln Lys Glu Glu Ile Glu Lys
 340 345 350
 Gln Lys Gln Glu Ser Ser Tyr Tyr Asn Ile Val Lys Thr Gln Ser Gln
 355 360 365
 Asn Gln His Ile Thr Glu Val Glu Lys Glu Met Pro Leu Gln Lys Thr
 370 375 380
 Asn Glu Glu Val Ser Leu Ser Gly Ile Asp Ser Glu Cys Thr Val Val
 385 390 395 400
 Gln Pro Ser Pro Gly Ser Gln Ser Asn Ala Arg Ile Leu Gly Val Cys
 405 410 415
 Ser Asp Asn Gln Leu Ser Thr Thr Ser Pro Glu Thr Val Ala Ala Lys
 420 425 430
 Arg Leu His His Val Leu Ala Ala Ser Glu Asp Lys Asp Lys Met Lys
 435 440 445
 Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys Ser Ala
 450 455 460
 Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln Thr Gln
 465 470 475 480
 Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys Pro Ile
 485 490 495
 Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu Asp His

500	505	510
Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln Gln Ser		
515	520	525
Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys Thr Lys		
530	535	540
Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu Ala Glu		
545	550	555
Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val Gln Leu		
565	570	575
Pro Thr Glu Ser Ile Gln Lys Asn Gln Glu Asp Lys Leu Lys Met Val		
580	585	590
Pro Arg Lys Gln Arg Glu Phe Ser Gly Ser Asp Arg Gly Lys Leu Pro		
595	600	605
Gly Ser Glu Glu Lys Asn Gln Gly Pro Ser Met Ile Gly Arg Lys Glu		
610	615	620
Glu Arg Leu Ile Thr Glu Arg Lys His Glu His Leu Lys Asn Lys Ser		
625	630	635
Ala Pro Lys Val Val Lys Gln Lys Val Ile Asp Ala His Leu Asp Ser		
645	650	655
Gln Thr Gln Asn Phe Gln Gln Thr Gln Ile Gln Thr Ala Glu Ser Lys		
660	665	670
Ala Glu His Lys Lys Leu Pro Gln Pro Tyr Asn Ser Leu Gln Glu Glu		
675	680	685
Lys Cys Leu Glu Val Lys Gly Ile Gln Glu Lys Gln Val Phe Ser Asn		
690	695	700
Thr Lys Asp Ser Lys Gln Glu Ile Thr Gln Asn Lys Ser Phe Phe Ser		
705	710	715
Ser Val Lys Glu Ser Gln Arg Asp Asp Gly Lys Gly Ala Leu Asn Ile		
725	730	735

Val Glu Phe Leu Arg Lys Arg Glu Glu Leu Gln Gln Ile Leu Ser Arg
 740 745 750

Val Lys Gln Phe Glu Ala Pro Asn Lys Ser Gly Leu Lys Thr Phe
 755 760 765

Gln Thr Leu Leu Asn Thr Ile Pro Gly Trp Leu Ile Ser Glu Asp Lys
 770 775 780

Arg Glu Tyr Ala Val His Ile Ala Met Glu Asn Asn Leu Glu Lys Val
 785 790 795 800

Lys Glu Glu Ile Thr His Ile Lys Thr Gln Ala Glu Asp Met Leu Val
 805 810 815

Ser Tyr Glu Asn Ile Ile Gln Thr Ala Met Met Ser Ser Lys Thr Gly
 820 825 830

Lys Pro Gly Asn Lys Pro Thr Ser Leu Asp Glu Thr Ser Ser Lys Val
 835 840 845

Ser Asn Val His Val Ser Asn Asn Lys Asn Ser Glu Gln Lys
 850 855 860

<210> 3352

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3352

Met Asn Phe Val Leu Val Lys Val Arg Tyr Asp Val Val Gly Met Phe

1 5 10 15

Trp Asn Met Phe Phe Gln Val Ala Ser Gly Gly Gly Val Gly Asp

20 25 30

Gly Val Gln Glu Pro Thr Thr Gly Asn Trp Arg Gly Met Leu Lys Thr

35	40	45
Ser Lys Ala Glu Glu Leu Leu Ala Glu Glu Lys Ser Lys Pro Ile Pro		
50	55	60
Ile Met Pro Ala Ser Pro Gln Lys Lys Lys Lys Ile Lys Gln His Pro		
65	70	75
Asp Arg Tyr Thr Tyr Ser Phe Arg Leu Thr Asp Leu Ser Cys Ile Tyr		
85	90	95
Gly Val Val Met Arg Phe Arg Thr Tyr Thr Tyr Phe Val Lys Ile Pro		
100	105	110
Gln Met Ile Leu Gly Met Asn Asp Tyr Ile Ile Asn Phe Lys Met Tyr		
115	120	125
Leu Glu Ile Leu Lys Thr Ser Ser Pro Val Ser Asn Arg Gln His Ile		
130	135	140
Tyr Ile Ala Asp Ile Thr Phe Phe Ser Val Tyr Asp Gln Val Phe Met		
145	150	155
Lys Asp Tyr Trp Gln Gly Lys Tyr Glu Tyr Val Asn Phe Ser Leu Trp		
165	170	175
His Gln Phe Thr Lys Glu Gln Gln Ala His Gln Leu Met Ser Asn Ile		
180	185	190
Lys Thr Pro Thr Ser Val		
195		

<210> 3353

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3353

Met Cys Met Ile Asn Val Pro Leu Glu Gln Asp Asp Trp Asn Pro Gln
 1 5 10 15
 Val Pro Ser Pro Thr Gln Leu Cys Pro Leu Ser Leu Pro Trp Pro Thr
 20 25 30
 Gln Leu Leu Gln Gln Thr Pro Val Gly Leu His Trp Ser Arg Gln Gln
 35 40 45
 Glu Gly Pro Gln Ala Leu Ser Tyr Trp Glu Ser Gly Asp Gly Thr Gly
 50 55 60
 Thr Arg Leu Leu Arg Lys Glu Gly Ser Trp Pro Val Gln Asn Val Ala
 65 70 75 80
 Asp Gly Pro Ala Trp Trp Leu Met Pro Val Val Leu Ala Leu Gly Glu
 85 90 95
 Ala Glu Ala Asp Arg Ser Pro Glu Val Gly Ser Pro Thr Pro Ala Trp
 100 105 110
 Pro Ala

<210> 3354

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3354

Met Gly Phe Val Asn Ser Arg Lys Gly Thr Lys Phe Cys Leu Lys Arg
 1 5 10 15
 Glu Gly Phe Ser Lys Gly Val Met Phe Asp Leu Arg Pro Arg Glu Gly
 20 25 30
 Glu Arg Lys Glu Ala Cys Arg Gly Ala Leu Val Thr Arg Gly Met Leu

35	40	45
Tyr Cys Val Asp Ser Arg Asn Arg Gly Glu Ala Leu Ala Leu Ser Leu		
50	55	60
Ser Ala Phe Trp Phe Met Gln Leu Ser Leu Pro Lys Ile Phe Phe Tyr		
65	70	75
Leu Cys Phe Cys Leu Gln Leu Leu Pro Leu Glu Val Ser Leu Ser Phe		
85	90	95
Lys Phe Arg Glu Pro Cys Leu Trp His		
100	105	

<210> 3355

<211> 250

<212> PRT

<213> Homo sapiens

<400> 3355

Met Pro Leu Asp Lys Met Val Asp Leu Ser Gly Ser Gln Leu Arg Arg			
1	5	10	15

Phe Pro Leu His Val Cys Ser Phe Arg Glu Leu Val Lys Leu Tyr Leu			
20	25	30	

Ser Asp Asn His Leu Asn Ser Leu Pro Pro Glu Leu Gly Gln Leu Gln			
35	40	45	

Asn Leu Gln Ile Leu Ala Leu Asp Phe Asn Asn Phe Lys Ala Leu Pro			
50	55	60	

Gln Val Val Cys Thr Leu Lys Gln Leu Cys Ile Leu Tyr Leu Gly Asn			
65	70	75	80

Asn Lys Leu Cys Asp Leu Pro Ser Glu Leu Ser Leu Leu Gln Asn Leu			
85	90	95	

Arg Thr Leu Trp Ile Glu Ala Asn Cys Leu Thr Gln Leu Pro Asp Val
 100 105 110
 Val Cys Glu Leu Ser Leu Leu Lys Thr Leu His Ala Gly Ser Asn Ala
 115 120 125
 Leu Arg Leu Leu Pro Gly Gln Leu Arg Arg Leu Gln Glu Leu Arg Thr
 130 135 140
 Ile Trp Leu Ser Gly Asn Arg Leu Thr Asp Phe Pro Thr Val Leu Leu
 145 150 155 160
 His Met Pro Phe Leu Glu Val Ile Asp Val Asp Trp Asn Ser Ile Arg
 165 170 175
 Tyr Phe Pro Ser Leu Ala His Leu Ser Ser Leu Lys Leu Val Ile Tyr
 180 185 190
 Asp His Asn Pro Cys Arg Asn Ala Pro Lys Val Ala Lys Gly Val Arg
 195 200 205
 Arg Val Gly Arg Trp Ala Glu Glu Thr Pro Glu Pro Asp Pro Arg Lys
 210 215 220
 Ala Arg Arg Tyr Ala Leu Val Arg Glu Glu Ser Gln Glu Leu Gln Ala
 225 230 235 240
 Pro Val Pro Leu Leu Pro Pro Thr Asn Ser
 245 250

<210> 3356

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3356

Met Thr Ser Val Ala His Met Ser Thr Phe Arg Pro His Ile Cys His

1	5	10	15
Leu Ser Lys Thr Ser Pro His Pro Leu Val Thr Arg Lys Arg Ala Ser			
20	25	30	
Ser Pro His Val Val Ile Val Leu Thr Ser Gly Leu Lys Gly Lys Ala			
35	40	45	
Ser Leu Arg Leu Arg Pro His Leu Pro Val Ile Phe His Pro Ile Pro			
50	55	60	
Leu Pro Arg Leu Leu Gly Leu Ser Ser Cys Ser Ile Pro Pro Phe Ala			
65	70	75	80
Val Ser Val Pro Pro Phe Pro Pro Gly Ser Ser Ser Ala Met Cys			
85	90	95	
Ser Leu Pro Phe Leu Leu Lys Arg Lys Thr			
100	105		

<210> 3357

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3357

1	5	10	15
Met Asn Asn Glu Thr Thr Leu Ile Ser Leu Lys Glu Ala Met Lys			
20	25	30	
Arg Val Asp His Lys Leu Gln Ala Leu Glu Thr Gln Phe Lys Glu Leu			
35	40	45	
Asp Phe Thr Lys Asp Asn Leu Met Gln Lys Phe Glu His His Ser Lys			
50	55	60	
Ala Leu Ala Ser Gln Ala Ala Gln Asp Glu Met Trp Thr Ala Val Arg			

Ala Leu Gln Leu Thr Ser Met Glu Leu Asn Ile Leu Tyr Ser Tyr Val
 65 70 75 80
 Ile Glu Val Leu Ile Cys Leu His Thr Arg Val Leu Glu Lys Leu Pro
 85 90 95
 Asp Leu Val Arg Gly Leu Pro Thr Leu Ala Ser Val Leu Arg Arg Lys
 100 105 110
 Val Lys Asn Lys Arg Val Arg Val Val Trp Glu Ser Ile Leu Glu Glu
 115 120 125
 Cys Gly Leu Gln Glu Gly Asp Ile Thr Ala Leu Cys Thr Phe Phe Ile
 130 135 140
 Ala Arg Gly Asn Lys Ala Glu His Tyr Thr Ala Lys Val Arg Gln Met
 145 150 155 160
 Tyr Ile Arg Asp Val Thr Phe Leu Ile Thr Asn Met Val Lys Asn Gln
 165 170 175
 Ala Leu Gln Asp Ser Leu Leu Arg Ala Val Gln Val Ile Glu Lys Gly
 180 185 190
 Lys Ala Val Arg Thr Pro Glu Lys Gln Lys Ser Ser Leu Glu Glu Leu
 195 200 205
 Ile Pro Ser Val Lys Asn
 210

<210> 3358

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3358

Met Gln Met Gly Asp Glu Phe Leu His Thr Leu Val Phe Leu Pro Phe

1	5	10	15												
Val	Asn	Leu	Thr	Thr	Asn	Val	Leu	Ser	Tyr	Arg	Lys	Met	Cys	Val	Arg
			20				25							30	
Val	Cys	Met	Ser	Glu	Cys	Val	Arg	Val	Cys	Val	Cys	Ala	Cys	Cys	Lys
						35		40						45	
Asn	Met	Leu	Glu	Cys	Glu	Cys	Gly	Val	Cys	Leu	His	Val	Cys	Met	Cys
						50		55						60	
Glu	Cys	Met	His	Ala	Arg	Val	Cys	Lys	Ser	Val	His	Val	His	Val	Cys
						65		70						80	
Glu	Thr	Thr	Gly	Met	Arg	Tyr	Val	Arg	Met	Ser	Val	Cys	Thr	Cys	Val
						85		90						95	
Ser	Met	Cys	Ile	Val	Tyr	Asn	Val	His	Glu	Tyr	Ser	Val	Arg	Ala	
						100		105						110	

<210> 3359

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3359

1	5	10	15												
Met	Gly	Lys	Arg	Asp	Asn	Arg	Val	Ala	Tyr	Met	Asn	Pro	Ile	Ala	Met
Ala	Arg	Ser	Arg	Gly	Pro	Ile	Gln	Ser	Ser	Gly	Pro	Thr	Ile	Gln	Asp
						20		25						30	
Tyr	Leu	Asn	Arg	Pro	Arg	Pro	Thr	Trp	Glu	Glu	Val	Lys	Glu	Gln	Leu
								35		40				45	
Glu	Lys	Lys	Lys	Gly	Ser	Lys	Ala	Leu	Ala	Glu	Phe	Glu	Glu	Lys	
						50		55						60	

Met Asn Glu Asn Trp Lys Lys Glu Leu Glu Lys His Arg Glu Lys Leu
 65 70 75 80
 Leu Ser Gly Ser Glu Ser Ser Ser Lys Lys Arg Gln Arg Lys Lys Lys
 85 90 95
 Glu Lys Lys Ser Gly Arg Val Ser Lys Asn Phe Pro Phe Phe
 100 105 110

<210> 3360

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3360

Met Glu Ala Leu Ala Ser Thr Glu Lys Met Leu Gln Asp Lys Val Asn
 1 5 10 15
 Lys Thr Ser Lys Glu Arg Gln Gln Gln Val Glu Ala Val Glu Leu Glu
 20 25 30
 Ala Lys Glu Val Leu Lys Leu Phe Pro Lys Val Ser Val Pro Ser
 35 40 45

Asn Leu Ser Tyr Gly Glu Trp Leu His Gly Phe Glu Lys Ala Lys
 50 55 60
 Glu Cys Met Ala Gly Thr Ser Gly Ser Glu Glu Val Lys Val Leu Glu
 65 70 75 80
 His Lys Leu Lys Glu Ala Asp Glu Met His Thr Leu Leu Gln Leu Glu
 85 90 95

Cys Glu Lys Tyr Lys Ser Val Leu Ala Glu Thr Glu Gly Ile Leu Gln
 100 105 110
 Lys Leu Gln Arg Ser Val Glu Gln Glu Glu Asn Lys Trp Lys Val Lys

115	120	125
Val Asp Glu Ser His Lys Thr Ile Lys Gln Met Gln Ser Ser Phe Thr		
130	135	140
Ser Ser Glu Gln Glu Leu Glu Arg Leu Arg Ser Glu Asn Lys Asp Ile		
145	150	155
Glu Asn Leu Arg Arg Glu Arg Glu His Leu Glu Met Glu Leu Gly Lys		
165	170	175
Ala Glu Met Glu Arg Ser Thr Tyr Val Thr Glu Val Arg Glu Leu Lys		
180	185	190
Ala Gln Leu Asn Glu Thr Leu Thr Lys Leu Arg Thr Glu Gln Asn Glu		
195	200	205
Arg Gln Lys Val Ala Gly Asp Leu His Lys Ala Gln Gln Ser Leu Glu		
210	215	220
Leu Ile Gln Ser Lys Ile Val Lys Ala Ala Gly Asp Thr Thr Val Ile		
225	230	235
Glu Asn Ser Asp Val Ser Pro Glu Thr Glu Ser Ser Glu Lys Glu Thr		
245	250	255
Met Ser Val Ser Leu Asn Gln Thr Val Thr Gln Leu Gln Gln Leu Leu		
260	265	270
Gln Ala Val Asn Gln Gln Leu Thr Lys Glu Lys Glu His Tyr Gln Val		
275	280	285
Leu Glu		
290		

<210> 3361

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3361

Met Ala Ala Ala Arg Thr Pro Pro Gly Gln Gln Pro Arg Leu Thr Ser
1 5 10 15
Pro Pro Pro Pro Ser Ile Ser Pro Ala Ala Trp Arg Trp Glu Ala Ala
20 25 30
Pro Arg Gly His Gly Pro Ser Pro Lys Ala His Thr Pro Ala Phe Arg
35 40 45
Arg His Pro Pro Leu Thr Thr Ala Arg Glu Val Ala Arg Val Arg Thr
50 55 60
Leu His Pro Gln Asp Val Ala Leu Ala Gly Pro Pro Gly Ser Gly Cys
65 70 75 80
Leu Arg Trp Val Trp Asp Leu Ser Cys Gly Val Phe Asp Gly Gly Trp
85 90 95
Leu Gly Arg Glu Ala Ser Ser Val Gly Arg Gly Pro Arg Gly Pro Gly
100 105 110
Ala Ala Val Val Lys Met Arg Arg His Gly Gly Arg Gly Lys Ala Pro
115 120 125
Leu Pro Ser Ser Thr Pro Ala Pro Gly Asp Cys Phe Leu Tyr
130 135 140

<210> 3362

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3362

Met Leu Arg Gln Cys Tyr Lys Glu Asp Gly Ser Ser Lys Ser Pro Asp

1	5	10	15
Cys Pro Val Cys Ser Arg Ser Leu Asn Lys Leu Ala Gln Pro Leu Pro			
20	25		30
Met Ala His Cys Ala Asn Ser Arg Leu Val Cys Lys Ile Ser Gly Asp			
35	40	45	
Val Met Asn Glu Asn Asn Pro Pro Met Met Leu Pro Asn Gly Tyr Val			
50	55	60	
Tyr Gly Tyr Asn Val Arg Gly Ala Gly Gln Gly Gln Ala Gly Thr			
65	70	75	80
His Arg His Arg Asp Arg Ala Val Trp Asp Gly Gln Gly Arg Gly Ala			
85	90		95
Arg Leu Ala Arg Ile Ala Ile Gly Thr Gly Leu Cys Gly Thr Gly Arg			
100	105	110	
Ala Gly Gly Gln Ala Gly Thr Arg Arg His Arg Asp Arg Ala Val Trp			
115	120	125	
Gly Gly Gln Gly Ser Gly Ala Arg Leu Ala His Val Ala Ile Gly Thr			
130	135	140	
Gly Leu Ser Ser Arg Pro Thr Leu Pro			
145	150		

<210> 3363

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3363

Met Ser Met Lys Leu Ser Val Thr Cys Glu Ser Ala Val Pro Met Ser

1	5	10	15
---	---	----	----

Ile Tyr Val Leu Asn Leu Leu Leu Phe Gln Lys Arg Gly Leu Ala His
 20 25 30
 Gln Leu Glu Glu Tyr Leu Leu Lys Trp Arg Arg Asn Lys Ala Thr Lys
 35 40 45
 Val Ala Lys Ile Ser Ser Glu Gln Lys Lys Ile Leu Arg Arg Lys Met
 50 55 60
 Val Leu Gln Leu Val Leu Gln Gly Leu Ala Thr Cys Val Ser His Ser
 65 70 75 80
 Arg Ala Ala Asn His Gly Val Gly Pro Ser His Phe Ala Gln Gly Gly
 85 90 95
 Leu Arg Ser Ser Gly Lys Val Leu Leu Gln Val Thr Asp Tyr Arg Cys
 100 105 110
 Val Val Glu Gly Gln Ala
 115

<210> 3364

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3364

Met Trp Ser Leu Pro His Pro Thr Trp Thr Leu Asp Ser Thr Cys Tyr
 1 5 10 15
 Ala Ala Ala Pro Ala Trp Ala Ser Phe Ser Pro Arg Thr Asp Ser Asp
 20 25 30
 Ile Pro His Cys Ser Thr Thr Leu His Gly His Pro Pro His Pro Ala
 35 40 45
 Trp Ala Leu Thr Pro Tyr Ser Arg Pro Pro Pro Ala Met Ser Gly His

50	55	60	
Pro Pro His Pro Ser Trp Ala Cys Lys Leu His Ile Thr Cys Pro His			
65	70	75	80
Ala Trp Ile Pro Phe Ser Pro His Met Ala Ser Asp Thr Pro Pro Trp			
85	90	95	
Thr Ala Ile Leu Gln Gly Ser Thr Ser Ser Pro Ala Gln Ala Cys Trp			
100	105	110	
Pro Pro Ala Trp Met Leu Phe Phe Thr Gly Pro Ala Leu Thr Pro Pro			
115	120	125	
Gly Ala Ser Cys Ala Gly Val Phe Leu Thr Leu Leu Gly Leu			
130	135	140	

<210> 3365

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3365

Met Asp Pro Val Ala Ser Ser Ser Ile Arg Pro Glu Pro Asp Ser His			
1	5	10	15
Tyr Leu Gln Phe Gln Thr Gln Pro His Val Leu Trp Asn Arg Leu Pro			
20	25	30	
Glu Ala Trp Asp Arg Ser Glu Ser Leu Asp Ser Ser Trp Gly Gly Trp			
35	40	45	
Val Gly Val Arg Gly Arg Val Pro Glu Gly Pro His Ser Thr Leu Ser			
50	55	60	
Trp Ser Ala Gly Gln Gln Glu Glu Gln Ala Trp Gly Trp Leu Trp Ser			
65	70	75	80

Leu Pro Pro Arg Ser Glu Ala Val Arg Gln Glu Lys Gly Glu Lys Glu
 85 90 95
 Pro Ser Phe Leu Glu Ser Asp Ser Asp Pro Ser Arg His Ser Gln Leu
 100 105 110
 Val Ser Gly Asp Leu Ser Leu Thr His
 115 120

<210> 3366

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3366

Met Pro Gln Thr Lys Asp Glu Gly Gly Arg Trp Gly Val Gly Gly
 1 5 10 15
 Leu Ser Asn Lys Val Trp Cys Cys Arg Thr Phe Ser Phe Phe Phe
 20 25 30
 Phe Phe Phe Phe Leu Phe Phe Phe Phe Phe Val Val Val Val
 35 40 45
 Val Val Val Phe Val Phe Ile Phe Phe Phe Leu Leu Ser Ser Ser Phe
 50 55 60
 Phe Leu Leu Pro Ser Ser Ser Phe Phe Leu Leu Leu Val Ser Leu Cys
 65 70 75 80
 Tyr Pro Ala Trp Ser Ala Leu Arg Gln Ser Gln Leu Thr Ala Thr Ser
 85 90 95
 Thr Cys Gln Val
 100

<210> 3367

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3367

Met Arg Val Leu Ser Arg Gly Gly Phe Gln Arg Val Lys Gly Arg His

1 5 10 15

Leu Pro Gln Leu Met Pro Gln Ser Ala Ala Pro Gln Val Ala Glu Glu

20 25 30

Gly Leu Phe Pro Gly Met Ile Leu Gln Thr Asn Ile Lys Ala Ile Val

35 40 45

Pro Leu Gly Leu Cys Leu Gly Arg Leu Lys Leu Arg Lys Leu Pro Lys

50 55 60

Val Ala Val Leu Met Ser Ala Ala Leu Lys Pro Lys Asp Met Gln Phe

65 70 75 80

Phe Phe Phe Phe Glu Met Glu Ser Cys Pro Val Ala Arg Leu Glu

85 90 95

Cys Ser Gly Val Ile Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser

100 105 110

Ser Asp Ser Ser Ala Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Thr

115 120 125

Cys His Tyr Thr Gln Ile Val Phe Val Phe Leu Val Glu Met Gly Phe

130 135 140

His His Val Gly Gln Asp Gly Leu Asp Leu Leu Thr Leu

145 150 155

<210> 3368

<211> 342

<212> PRT

<213> Homo sapiens

<400> 3368

Met Asn Pro Ser Glu Met Gln Gly Lys Ala Pro Pro Gln Arg Gln Arg

1 5 10 15

Thr Arg Asn Arg Thr Ser Leu Thr Arg Arg Val Asn Lys Met Val Ile

20 25 30

Ser Glu Glu Gln Met Lys Leu Pro Ser Thr Lys Lys Ala Gly Pro Pro

35 40 45

Thr Trp Ala Gln Leu Lys Lys Leu Thr Gln Leu Ala Glu Lys Ser Leu

50 55 60

Glu Asn Thr Arg Val Thr Gln Thr Pro Glu Asn Lys Leu Ala Ala

65 70 75 80

Leu Met Ile Val Ser Thr Val Val Ser Leu Pro Met Ser Ala Gly Ala

85 90 95

Ala Thr Ala Asn Tyr Thr Tyr Trp Ala Tyr Val Pro Phe Pro Pro Leu

100 105 110

Ile Arg Ala Val Thr Trp Ile Asp Asn Pro Ile Glu Val Tyr Val Asn

115 120 125

Asn Ser Ala Trp Val Pro Gly Pro Thr Asp Asp Arg Gly Pro Ala Gln

130 135 140

Pro Glu Glu Glu Gly Met Met Ile Asn Ile Ser Ile Gly Tyr His Tyr

145 150 155 160

Pro Ser Ile Cys Leu Gly Lys Thr Pro Gly Cys Leu Met Pro Thr Ile

165 170 175

Gln Asn Trp Leu Val Glu Glu Pro Thr Val Ser Ala Thr Ser Lys Phe

180	185	190
Thr Tyr His Met Ile Ser Gly Met Ser Leu Gly Ser Gln Met Asn Asn		
195	200	205
Leu Gln Asn Ser Ser Tyr Gln Arg Ser Leu Lys Phe Arg Pro Lys Trp		
210	215	220
Lys Pro Cys Gln Lys Glu Ile Pro Glu Glu Ser Lys Asp Pro Glu Val		
225	230	235
Leu Val Trp Glu Glu Cys Val Ala Asp Thr Ala Val Val Leu Gln Asn		
245	250	255
Asn Lys Phe Arg Ile Ile Asp Trp Ala Pro Arg Gly Gln Leu Tyr		
260	265	270
Tyr Asp Cys Met Gly Gln Thr His Ser Cys Ser Gln Ala Pro Ser Val		
275	280	285
Trp Pro Thr Asn Leu Ala Tyr Asp Gly Asp Leu Thr Lys Arg Leu Asp		
290	295	300
Gln Val Tyr Arg Arg Leu Glu Ser Pro Tyr Ser Trp Lys Trp Gly Glu		
305	310	315
Lys Gly Ile Pro Ser Pro Arg Pro Lys Leu Val Ser Pro Val Val Gly		
325	330	335
Pro Glu His Pro Glu Leu		
340		

<210> 3369

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3369

Met Pro Arg Arg Leu Gln Pro Arg Gly Ala Gly Thr Lys Gly Pro Pro
 1 5 10 15
 Ala Pro Ala Pro Ala Ala Ser Gly Ala Ala Arg Asn Ser His Ser Ala
 20 25 30
 Ala Ser Arg Asp Pro Pro Ala Ser Ala Lys Pro Leu Leu Arg Trp Asp
 35 40 45
 Glu Val Pro Asp Asp Phe Val Glu Cys Phe Ile Leu Ser Gly Tyr Arg
 50 55 60
 Arg Leu Pro Cys Thr Ala Gln Glu Cys Leu Ala Ser Val Leu Lys Pro
 65 70 75 80
 Thr Asn Glu Thr Leu Asn Phe Trp Thr His Phe Ile Pro Leu Leu
 85 90 95
 Phe Leu Ser Lys Phe Cys Arg Leu Phe Phe Leu Ser Gly Gly Asp Val
 100 105 110
 Pro Phe His His Pro Trp Leu Leu Pro Leu Trp Cys Tyr Ala Ser Gly
 115 120 125
 Val Leu Leu Thr Phe Ala Met Ser Cys Thr Ala His Val Phe Ser Cys
 130 135 140
 Leu Ser Leu Arg Leu Arg Ala Ala Phe Phe Tyr Leu Asp Tyr Ala Ser
 145 150 155 160
 Ile Ser Tyr Tyr Gly Phe Gly Ser Thr Val Ala Tyr Tyr Tyr Leu
 165 170 175
 Leu Pro Gly Leu Ser Leu Leu Asp Ala Arg Val Met Thr Pro Tyr Leu
 180 185 190
 Gln Gln Arg Leu Gly Trp His Val Asp Cys Thr Arg Leu Ile Ala Ala
 195 200 205
 Tyr Arg Ala Leu Val Leu Pro Val Ala Phe Val Leu Ala Val Ala Cys
 210 215 220
 Thr Val Ala Cys Cys Lys Ser Arg Thr Asp Trp Cys Thr Tyr Pro Phe

225	230	235	240
Ala Leu Arg Thr Phe Val Phe Val Met Pro Leu Ser Met Ala Cys Pro			
245	250	255	
Ile Met Leu Glu Ser Trp Leu Phe Asp Leu Arg Gly Glu Asn Pro Thr			
260	265	270	
Leu Phe Val His Phe Tyr Arg Arg Tyr Phe Trp Leu Val Val Ala Ala			
275	280	285	
Phe Phe Asn Val Ser Lys Ile Pro Glu Arg Ile Gln Pro Gly Leu Phe			
290	295	300	
Asp Ile Ile Gly His Ser His Gln Leu Phe His Ile Phe Thr Phe Leu			
305	310	315	320
Ser Ile Tyr Asp Gln Val Tyr Tyr Val Glu Glu Gly Leu Arg Gln Phe			
325	330	335	
Leu Gln Ala Pro Pro Ala Ala Pro Thr Phe Ser Gly Thr Val Gly Tyr			
340	345	350	
Met Leu Leu Leu Val Val Cys Leu Gly Leu Val Ile Arg Lys Phe Leu			
355	360	365	
Asn Ser Ser Glu Phe Cys Ser Lys Lys			
370	375		

<210> 3370

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3370

Met Pro Ala Ser Ser Leu Leu Ser Ile Leu Pro Pro Arg Tyr Ile Ser

1

5

10

15

Asn Leu Pro Thr Phe Leu Glu Leu His Ile Thr Asp Leu Val Gln Ala
 20 25 30
 Ile Ile Ile Ser Leu Leu Gly Pro Thr Lys Thr Leu Ile Thr Val Leu
 35 40 45
 Phe Val Ser Phe Cys Leu Phe Leu Arg Gln Ser Leu Ile Leu Ile Thr
 50 55 60
 Gln Ala Gly Val Gln Trp His Asp Leu Ser Ser Leu Gln Pro Leu Pro
 65 70 75 80
 Pro Met Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Arg Ser Trp Asp
 85 90 95
 Tyr Trp His Ala Pro Pro His Gln Ala Asn Phe Ile Phe Leu Val Glu
 100 105 110
 Met Gly Phe His Pro Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser
 115 120 125
 Gly Asp Pro Pro Ala Ser Ala Ser Arg Ser Ala Gly Ile Thr Gly Met
 130 135 140
 Asn His His Gly Arg Leu Thr Phe Ile Leu Ser Leu Val Leu Glu
 145 150 155 160
 Tyr Ser Gln Ile Ile Phe His Cys Val Tyr Ile Pro His Phe Ala His
 165 170 175
 Trp Phe Leu Met Val Arg Ser Glu Leu Trp Val Asp Leu Ala Ile Gly
 180 185 190
 Arg

<210> 3371

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3371

Met Phe Arg Lys Thr Thr Ser Phe Phe Phe Phe Trp Arg Gln Gly

1 5 10 15

Leu Ala Leu Ser Pro Arg Leu Gly Cys Ser Gly Val Ile Leu Ala His

20 25 30

Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser

35 40 45

Gly Val Ala Gly Ile Thr Gly Ile Cys Asp His Ala Arg Leu Ile Phe

50 55 60

Val Phe Ser Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly Leu

65 70 75 80

Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Trp Ala Ser Gln Ser Ala

85 90 95

Gln Ile Thr Gly Val Ser His Arg Ala Gln Ser Glu Asn Tyr Leu Tyr

100 105 110

Tyr Cys Ser Cys Ile Leu Lys Asn Ser Leu Arg Pro

115 120

<210> 3372

<211> 515

<212> PRT

<213> Homo sapiens

<400> 3372

Met Leu Met His Trp Gly Trp Phe Leu Glu His Asp Leu Asp His Thr

1 5 10 15

Val Pro Ala Leu Ser Thr Ala Arg Phe Ser Asp Gly Arg Pro Cys Asn
 20 25 30
 Ser Val Cys Thr Asn Asp Pro Pro Cys Phe Pro Met Asn Thr Arg His
 35 40 45
 Ala Asp Pro Arg Gly Thr His Ala Pro Cys Met Leu Phe Ala Arg Ser
 50 55 60
 Ser Pro Ala Cys Ala Ser Gly Arg Pro Ser Ala Thr Val Asp Ser Val
 65 70 75 80
 Tyr Ala Arg Glu Gln Ile Asn Gln Gln Thr Ala Tyr Ile Asp Gly Ser
 85 90 95
 Asn Val Tyr Gly Ser Ser Glu Arg Glu Ser Gln Ala Leu Arg Asp Pro
 100 105 110
 Ser Val Pro Arg Gly Leu Leu Lys Thr Gly Phe Pro Trp Pro Pro Ser
 115 120 125
 Gly Lys Pro Leu Leu Pro Phe Ser Thr Gly Pro Pro Thr Glu Cys Ala
 130 135 140
 Arg Gln Glu Gln Glu Ser Pro Cys Phe Leu Ala Gly Asp His Arg Ala
 145 150 155 160
 Asn Glu His Leu Ala Leu Ala Ala Met His Thr Leu Trp Phe Arg Glu
 165 170 175
 His Asn Arg Val Ala Thr Glu Leu Ser Ala Leu Asn Pro His Trp Glu
 180 185 190
 Gly Asn Thr Val Tyr Gln Glu Ala Arg Lys Ile Val Gly Ala Glu Leu
 195 200 205
 Gln His Ile Thr Tyr Ser His Trp Leu Pro Lys Val Leu Gly Asp Pro
 210 215 220
 Gly Thr Arg Met Leu Arg Gly Tyr Arg Gly Tyr Asn Pro Asn Val Asn
 225 230 235 240
 Ala Gly Ile Ile Asn Ser Phe Ala Thr Ala Ala Phe Arg Phe Gly His

245	250	255
Thr Leu Ile Asn Pro Ile Leu Tyr Arg Leu Asn Ala Thr Leu Gly Glu		
260	265	270
Ile Ser Glu Gly His Leu Pro Phe His Lys Ala Leu Phe Ser Pro Ser		
275	280	285
Arg Ile Ile Lys Glu Gly Gly Ile Asp Pro Val Leu Arg Gly Leu Phe		
290	295	300
Gly Val Ala Ala Lys Trp Arg Ala Pro Ser Tyr Leu Leu Ser Pro Glu		
305	310	315
Leu Thr Gln Arg Leu Phe Ser Ala Ala Tyr Ser Ala Ala Val Asp Ser		
325	330	335
Ala Ala Thr Ile Ile Gln Arg Gly Arg Asp His Gly Ile Pro Pro Tyr		
340	345	350
Val Asp Phe Arg Val Phe Cys Asn Leu Thr Ser Val Lys Asn Phe Glu		
355	360	365
Asp Leu Gln Asn Glu Ile Lys Asp Ser Glu Ile Arg Gln Lys Leu Arg		
370	375	380
Lys Leu Tyr Gly Ser Pro Gly Asp Ile Asp Leu Trp Pro Ala Leu Met		
385	390	395
Val Glu Asp Leu Ile Pro Gly Thr Arg Val Gly Pro Thr Leu Met Cys		
405	410	415
Leu Phe Val Thr Gln Phe Gln Arg Leu Arg Asp Gly Asp Arg Phe Trp		
420	425	430
Tyr Glu Asn Pro Gly Val Phe Thr Pro Ala Gln Leu Thr Gln Leu Lys		
435	440	445
Gln Ala Ser Leu Ser Arg Val Leu Cys Asp Asn Gly Asp Ser Ile Gln		
450	455	460
Gln Val Gln Ala Asp Val Phe Val Lys Ala Glu Tyr Pro Gln Asp Tyr		
465	470	475
480		

Leu Asn Cys Ser Glu Ile Pro Lys Val Asp Leu Arg Val Trp Gln Asp
 485 490 495
 Cys Cys Ala Asp Lys Gln Ala Gly Gly Thr Pro Glu Ala Gly Arg Val
 500 505 510
 Tyr Arg Cys
 515

<210> 3373

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3373

Met Trp Thr Glu Trp Gly Pro Val Gly Gly Pro Ser Ala Ala Pro Tyr
 1 5 10 15
 Gly Gln Asp Pro His Arg Leu Gly Cys Ser Gly Pro Gln Val Ala Leu
 20 25 30
 Val Trp Gly Glu Lys Ala Gln Gln Ala Glu Pro Gly Phe Leu Pro His
 35 40 45
 Pro His Ile Pro Val Tyr Leu Leu Asp Leu Gln Pro Gln Ile Pro Gly
 50 55 60
 Pro Leu Thr Trp Leu Arg Asn Arg Val Arg Ala Gly Val Leu Ser Arg
 65 70 75 80
 Gly Trp Ala Arg Glu Pro Gly Ser Gly Arg Gln Ser Trp Cys Pro Gly
 85 90 95
 Gly Gly Gly Pro Gly Arg Leu His Trp Glu Pro Ala Pro Gly Trp Gly
 100 105 110
 Val Pro Gln Ala Tyr Arg Glu Gln Thr Leu Leu Leu Arg Arg Gly Gly

115	120	125
Leu Gln Pro Ala Val Leu Ser Leu Arg Val Leu His Leu Leu Asp Ala		
130	135	140
Gly Thr Gln Gln Leu Ile Leu Glu Gln Gly Arg Val Gly Gln Ala Val		
145	150	155
Cys Gly His Gln Ala Gln		
165		

<210> 3374

<211> 868

<212> PRT

<213> Homo sapiens

<400> 3374

Met Trp Pro Arg Leu Ala Phe Cys Cys Trp Gly Leu Ala Leu Val Ser			
1	5	10	15

Gly Trp Ala Thr Phe Gln Gln Met Ser Pro Ser Arg Asn Phe Ser Phe			
20	25	30	

Arg Leu Phe Pro Glu Thr Ala Pro Gly Ala Pro Gly Ser Ile Pro Ala			
35	40	45	

Pro Pro Ala Pro Gly Asp Glu Ala Ala Gly Ser Arg Val Glu Arg Leu			
50	55	60	

Gly Gln Ala Phe Arg Arg Arg Val Arg Leu Leu Arg Glu Leu Ser Glu			
65	70	75	80

Arg Leu Glu Leu Val Phe Leu Val Asp Asp Ser Ser Ser Val Gly Glu			
85	90	95	

Val Asn Phe Arg Ser Glu Leu Met Phe Val Arg Lys Leu Leu Ser Asp			
100	105	110	

Phe Pro Val Val Pro Thr Ala Thr Arg Val Ala Ile Val Thr Phe Ser
 115 120 125
 Ser Lys Asn Tyr Val Val Pro Arg Val Asp Tyr Ile Ser Thr Arg Arg
 130 135 140
 Ala Arg Gln His Lys Cys Ala Leu Leu Leu Gln Glu Ile Pro Ala Ile
 145 150 155 160
 Ser Tyr Arg Gly Gly Thr Tyr Thr Lys Gly Ala Phe Gln Gln Ala
 165 170 175
 Ala Gln Ile Leu Leu His Ala Arg Glu Asn Ser Thr Lys Val Val Phe
 180 185 190
 Leu Ile Thr Asp Gly Tyr Ser Asn Gly Gly Asp Pro Arg Pro Ile Ala
 195 200 205
 Ala Ser Leu Arg Asp Ser Gly Val Glu Ile Phe Thr Phe Gly Ile Trp
 210 215 220
 Gln Gly Asn Ile Arg Glu Leu Asn Asp Met Ala Ser Thr Pro Lys Glu
 225 230 235 240
 Glu His Cys Tyr Leu Leu His Ser Phe Glu Glu Phe Glu Ala Leu Ala
 245 250 255
 Arg Arg Ala Leu His Glu Asp Leu Pro Ser Gly Ser Phe Ile Gln Asp
 260 265 270
 Asp Met Val His Cys Ser Tyr Leu Cys Asp Glu Gly Lys Asp Cys Cys
 275 280 285
 Asp Arg Met Gly Ser Cys Lys Cys Gly Thr His Thr Gly His Phe Glu
 290 295 300
 Cys Ile Cys Glu Lys Gly Tyr Tyr Gly Lys Gly Leu Gln Tyr Glu Cys
 305 310 315 320
 Thr Ala Cys Pro Ser Gly Thr Tyr Lys Pro Glu Gly Ser Pro Gly Gly
 325 330 335
 Ile Ser Ser Cys Ile Pro Cys Pro Asp Glu Asn His Thr Ser Pro Pro

340	345	350
Gly Ser Thr Ser Pro Glu Asp Cys Val Cys Arg Glu Gly Tyr Arg Ala		
355	360	365
Ser Gly Gln Thr Cys Glu Leu Val His Cys Pro Ala Leu Lys Pro Pro		
370	375	380
Glu Asn Gly Tyr Phe Ile Gln Asn Thr Cys Asn Asn His Phe Asn Ala		
385	390	395
Ala Cys Gly Val Arg Cys His Pro Gly Phe Asp Leu Val Gly Ser Ser		
405	410	415
Ile Ile Leu Cys Leu Pro Asn Gly Leu Trp Ser Gly Ser Glu Ser Tyr		
420	425	430
Cys Arg Val Arg Thr Cys Pro His Leu Arg Gln Pro Lys His Gly His		
435	440	445
Ile Ser Cys Ser Thr Arg Glu Met Leu Tyr Lys Thr Thr Cys Leu Val		
450	455	460
Ala Cys Asp Glu Gly Tyr Arg Leu Glu Gly Ser Asp Lys Leu Thr Cys		
465	470	475
Gln Gly Asn Ser Gln Trp Asp Gly Pro Glu Pro Arg Cys Val Glu Arg		
485	490	495
His Cys Ser Thr Phe Gln Met Pro Lys Asp Val Ile Ile Ser Pro His		
500	505	510
Asn Cys Gly Lys Gln Pro Ala Lys Phe Gly Thr Ile Cys Tyr Val Ser		
515	520	525
Cys Arg Gln Gly Phe Ile Leu Ser Gly Val Lys Glu Met Leu Arg Cys		
530	535	540
Thr Thr Ser Gly Lys Trp Asn Val Gly Val Gln Ala Ala Val Cys Lys		
545	550	555
Asp Val Glu Ala Pro Gln Ile Asn Cys Pro Lys Asp Ile Glu Ala Lys		
565	570	575

Ala Leu Glu Gln Gln Asp Ser Ala Asn Val Thr Trp Gln Ile Pro Thr
 580 585 590
 Ala Lys Asp Asn Ser Gly Glu Lys Val Ser Val His Val His Pro Ala
 595 600 605
 Phe Thr Pro Pro Tyr Leu Phe Pro Ile Gly Asp Val Ala Ile Val Tyr
 610 615 620
 Thr Ala Thr Asp Leu Ser Gly Asn Gln Ala Ser Cys Ile Phe His Ile
 625 630 635 640
 Lys Val Ile Asp Ala Glu Pro Pro Val Ile Asp Trp Cys Arg Ser Pro
 645 650 655
 Pro Pro Val Gln Val Ser Glu Lys Val His Ala Ala Ser Trp Asp Glu
 660 665 670
 Pro Gln Phe Ser Asp Asn Ser Gly Ala Glu Leu Val Ile Thr Arg Ser
 675 680 685
 His Thr Gln Gly Asp Leu Phe Pro Gln Gly Glu Thr Ile Val Gln Tyr
 690 695 700
 Thr Ala Thr Asp Pro Ser Gly Asn Asn Arg Thr Cys Asp Ile His Ile
 705 710 715 720
 Val Ile Lys Gly Ser Pro Cys Glu Ile Pro Phe Thr Pro Val Asn Gly
 725 730 735
 Asp Phe Ile Cys Thr Pro Asp Asn Thr Gly Val Asn Cys Thr Leu Thr
 740 745 750
 Cys Leu Glu Gly Tyr Asp Phe Thr Glu Gly Ser Thr Asp Lys Tyr Tyr
 755 760 765
 Cys Ala Tyr Glu Asp Gly Val Trp Lys Pro Thr Tyr Thr Glu Trp
 770 775 780
 Pro Asp Cys Ala Lys Lys Arg Phe Ala Asn His Gly Phe Lys Ser Phe
 785 790 795 800
 Glu Met Phe Tyr Lys Ala Ala Arg Cys Asp Asp Thr Asp Leu Met Lys

805	810	815
Lys Phe Ser Glu Ala Phe Glu Thr Thr Leu Gly Lys Met Val Pro Ser		
820	825	830
Phe Cys Ser Asp Ala Glu Asp Ile Asp Cys Arg Leu Glu Glu Asn Leu		
835	840	845
Thr Lys Lys Tyr Cys Leu Glu Tyr Asn Tyr Asp Tyr Glu Asn Gly Phe		
850	855	860
Ala Ile Gly Asn		
865		

<210> 3375

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3375

Met Ser Val Pro His Ala His Thr Gln Ser Cys Asn Asp Asn Gly Lys			
1	5	10	15

Lys Cys Leu Leu Thr Leu Pro Asn Val Pro Ser Gly Gly Lys Leu Pro			
20	25	30	

Leu Val Glu Asn His Cys Ser Ile Pro Phe His Gln Leu Arg Asp Pro			
35	40	45	

Pro Pro Ser Leu Arg His Leu Gln Asp Leu Val Leu Phe Trp Ser Gly			
50	55	60	

Pro Leu Gln Thr Leu Asn His Gln Pro Ala Ala Phe Val Val Leu Asp			
65	70	75	80

Val Ser Ala Asn Phe Ala Gly His Thr Gly Val Pro Lys Glu Val Lys			
85	90	95	

Val Ile Ile Leu Gly Arg Glu Gly Glu Gly Ser Lys Arg Gly Arg Met
 100 105 110
 Arg Phe Leu Gly Arg Gly Val Lys Leu Val Pro Val Leu Cys Tyr
 115 120 125
 Cys Leu Leu Pro Ser Tyr Leu Asn Leu Lys Glu Leu Pro His Leu Gln
 130 135 140
 Gln Asp Leu Leu Gly Ile Gly Val Leu Leu Ala Ile Asn Ser Cys
 145 150 155 160
 Leu Gln Gly Lys Gly Gly
 165

<210> 3376

<211> 559

<212> PRT

<213> Homo sapiens

<400> 3376

Met Ala Gly Leu Thr Ala Ala Ala Pro Arg Pro Gly Val Leu Leu Leu
 1 5 10 15
 Leu Leu Ser Ile Leu His Pro Ser Arg Pro Gly Gly Val Pro Gly Ala
 20 25 30
 Ile Pro Gly Gly Val Pro Gly Gly Val Phe Tyr Pro Ala Leu Gly Pro
 35 40 45
 Gly Gly Lys Pro Leu Lys Pro Val Pro Gly Gly Leu Ala Gly Ala Gly
 50 55 60
 Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe Pro Gly Ala
 65 70 75 80
 Leu Val Pro Gly Gly Val Ala Asp Ala Ala Ala Tyr Lys Ala Ala

85	90	95
Lys Ala Gly Ala Gly Leu Gly Gly Val Pro Gly Val Gly Gly Leu Gly		
100	105	110
Val Ser Ala Ala Pro Ser Val Pro Gly Ala Val Val Pro Gln Pro Gly		
115	120	125
Ala Gly Val Lys Pro Gly Lys Val Pro Gly Val Gly Leu Pro Gly Val		
130	135	140
Tyr Pro Gly Gly Val Leu Pro Gly Ala Arg Phe Pro Gly Val Gly Val		
145	150	155
Leu Pro Gly Val Pro Thr Gly Ala Gly Val Lys Pro Lys Ala Pro Gly		
165	170	175
Val Gly Gly Ala Phe Ala Gly Ile Pro Gly Val Gly Pro Phe Gly Gly		
180	185	190
Pro Gln Pro Gly Val Pro Leu Gly Tyr Pro Ile Lys Ala Pro Lys Leu		
195	200	205
Pro Gly Gly Tyr Gly Leu Pro Tyr Thr Thr Gly Lys Leu Pro Tyr Gly		
210	215	220
Tyr Gly Pro Gly Gly Val Ala Gly Ala Ala Gly Lys Ala Gly Tyr Pro		
225	230	235
Thr Gly Thr Gly Val Gly Pro Gln Ala Ala Ala Ala Ala Ala Lys		
245	250	255
Ala Ala Ala Lys Phe Gly Ala Gly Ala Ala Gly Val Leu Pro Gly Val		
260	265	270
Gly Gly Ala Gly Val Pro Gly Val Pro Gly Ala Ile Pro Gly Ile Gly		
275	280	285
Gly Ile Ala Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Ala Ala		
290	295	300
Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Ala Gly Leu Val Pro Gly		
305	310	315
320		

Gly Pro Gly Phe Gly Pro Gly Val Val Gly Val Pro Gly Ala Gly Val
 325 330 335
 Pro Gly Val Gly Val Pro Gly Ala Gly Ile Pro Val Val Pro Gly Ala
 340 345 350
 Gly Ile Pro Gly Ala Ala Val Pro Gly Val Val Ser Pro Glu Ala Ala
 355 360 365
 Ala Lys Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Arg Pro Gly Val
 370 375 380
 Gly Val Gly Gly Ile Pro Thr Tyr Gly Val Gly Ala Gly Gly Phe Pro
 385 390 395 400
 Gly Phe Gly Val Gly Val Gly Gly Ile Pro Gly Val Ala Gly Val Pro
 405 410 415
 Gly Val Gly Gly Ser Arg Ser Arg Arg Cys Pro Gly Ser Trp His Phe
 420 425 430
 Pro Arg Ser Ser Gly Ser Ser Cys Arg Gln Gly Cys Gln Val Arg Val
 435 440 445
 Ser Ser Trp Cys Arg Arg Gly Ser Trp Ser Trp Arg Gly Ser Trp Cys
 450 455 460
 Arg Cys Gly Ser Trp Ser Trp Leu Gly Ser Trp Ser Trp Arg Gly Ser
 465 470 475 480
 Trp Ser Trp Cys Gly Ser Trp Arg Trp Arg Gly Ser Arg His Trp Pro
 485 490 495
 Trp Trp Ser Cys Ser Cys Ser Lys Ile Arg Cys Gln Gly Cys Gln
 500 505 510
 Ser Pro Ala Pro Ser Cys Ser Trp Ala Trp Cys Trp His Pro Trp Thr
 515 520 525
 Trp Ser Trp Cys Arg Arg Pro Trp Thr Trp Ser Trp Cys Trp Cys Ser
 530 535 540
 Trp Thr Trp Ser Trp Cys Trp Cys Ser Trp Leu Arg Gly Ser Thr

545	550	555
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<210> 3377

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3377

Met Glu Gly Ser Arg Pro Ala Ala Pro Ala Glu Pro Gly Thr Leu Lys

1	5	10	15
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Thr Ser Leu Val Ala Thr Pro Gly Ile Asp Lys Leu Thr Glu Lys Ser

20	25	30
----	----	----

Gln Val Ser Glu Asp Gly Thr Leu Arg Ser Leu Glu Pro Glu Pro Gln

35	40	45
----	----	----

Gln Ser Leu Glu Asp Gly Ser Pro Ala Lys Gly Glu Pro Ser Gln Ala

50	55	60
----	----	----

Trp Arg Glu Gln Arg Arg Pro Ser Thr Ser Ser Ala Ser Gly Gln Trp

65	70	75	80
----	----	----	----

Ser Pro Thr Pro Glu Trp Val Leu Ser Trp Lys Ser Lys Leu Pro Leu

85	90	95
----	----	----

Gln Thr Ile Met Arg Leu Leu Gln Val Leu Val Pro Gln Val Glu Lys

100	105	110
-----	-----	-----

Ile Cys Ile Asp Lys Gly Leu Thr Asp Glu Ser Glu Ile Leu Arg Phe

115	120	125
-----	-----	-----

Leu Gln His Gly Thr Leu Val Gly Leu Leu Pro Val Pro His Pro Ile

130	135	140
-----	-----	-----

Leu Ile Arg Lys Tyr Gln Ala Asn Ser Gly Thr Ala Met Trp Phe Arg

145	150	155	160
-----	-----	-----	-----

Thr Tyr Met Trp Gly Val Ile Tyr Leu Arg Asn Val Asp Pro Pro Val
 165 170 175

Trp Tyr Asp Thr Asp Val Lys Leu Phe Glu Ile Gln Arg Val
 180 185 190

<210> 3378

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3378

Met Lys Pro His Lys Ser Leu Ala Arg His Ile Ile Ile Pro Val Leu
 1 5 10 15

Leu Ser Arg Lys Leu Ser Glu Arg Asp Tyr Arg Asn Cys Pro Gly His
 20 25 30

Pro Ala Gly Lys Trp Arg Ile Gln Val Ser Thr Pro Gly Pro Ala Pro
 35 40 45

Ala Tyr Phe Leu Phe Ser Met Cys Glu Ile Gln Cys Tyr Pro Val Ser
 50 55 60

Glu Ser Ser Val Arg Cys Gly Ser Cys His Pro Phe Leu Trp Pro Cys
 65 70 75 80

Ser Leu Arg Leu Phe Lys Leu Leu Leu Ser Arg Thr Leu Phe His
 85 90 95

Ile Ser Gln Pro Leu Asn Cys Leu Asn Gly Pro Arg Cys Leu Arg Pro
 100 105 110

Ile Thr Ser Gly His Ala Lys Val Gly Phe Ala Val Pro Arg Arg Asp
 115 120 125

Cys Ser Ala Gln Pro Arg Leu Pro Phe Pro Leu Pro Val Pro Ile Leu

130	135	140	
Pro Cys Thr Ile Cys Pro Leu His Gly Gln Gly Arg Gly Pro Ser Gly			
145	150	155	160
Leu Phe Ala Gln Lys Ile			
165			

<210> 3379

<211> 538

<212> PRT

<213> Homo sapiens

<400> 3379

Met	Gly	Leu	Leu	Leu	Leu	Val	Leu	Ile	Leu	Thr	Pro	Ser	Leu	Ala	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10	15
---	---	----	----

Tyr	Arg	His	Pro	Asp	Phe	Pro	Leu	Leu	Glu	Lys	Ala	Gln	Gln	Leu	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

20	25	30
----	----	----

Gln	Ser	Thr	Gly	Ser	Pro	Tyr	Ser	Thr	Asn	Cys	Trp	Leu	Cys	Thr	Ser
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

35	40	45
----	----	----

Ser	Ser	Thr	Glu	Thr	Pro	Gly	Thr	Ala	Tyr	Pro	Ala	Ser	Pro	Arg	Glu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50	55	60
----	----	----

Trp	Thr	Ser	Ile	Glu	Ala	Glu	Leu	His	Ile	Ser	Tyr	Arg	Trp	Asp	Pro
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

65	70	75	80
----	----	----	----

Asn	Leu	Lys	Gly	Leu	Met	Arg	Pro	Ala	Asn	Ser	Leu	Leu	Ser	Thr	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

85	90	95
----	----	----

Lys	Gln	Asp	Phe	Pro	Asp	Ile	Arg	Gln	Lys	Pro	Pro	Ile	Phe	Gly	Pro
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

100	105	110
-----	-----	-----

Ile	Phe	Thr	Asn	Ile	Asn	Leu	Met	Gly	Ile	Ala	Pro	Ile	Cys	Val	Met
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

115	120	125
-----	-----	-----

Ala Lys Arg Lys Asn Gly Thr Asn Val Gly Thr Leu Pro Ser Thr Val
 130 135 140
 Cys Asn Val Thr Phe Thr Val Asp Ser Asn Gln Gln Thr Tyr Gln Thr
 145 150 155 160
 Tyr Thr His Asn Gln Phe Arg His Gln Pro Arg Phe Pro Lys Pro Pro
 165 170 175
 Asn Ile Thr Phe Pro Gln Gly Thr Leu Leu Asp Lys Ser Ser Arg Phe
 180 185 190
 Cys Gln Gly Arg Pro Ser Ser Cys Ser Thr Arg Asn Phe Trp Phe Arg
 195 200 205
 Pro Ala Asp Tyr Asn Gln Cys Leu Gln Ile Ser Asn Leu Ser Ser Thr
 210 215 220
 Ala Glu Trp Val Leu Leu Asp Gln Thr Arg Asn Ser Leu Phe Trp Glu
 225 230 235 240
 Asn Lys Thr Lys Gly Ala Asn Gln Ser Gln Thr Pro Cys Val Gln Val
 245 250 255
 Leu Ala Gly Met Thr Ile Ala Thr Ser Tyr Leu Gly Ile Ser Ala Val
 260 265 270
 Ser Glu Phe Phe Gly Thr Ser Leu Thr Pro Leu Phe His Phe His Ile
 275 280 285
 Ser Thr Cys Leu Lys Thr Gln Gly Ala Phe Tyr Ile Cys Gly Gln Ser
 290 295 300
 Ile His Gln Cys Leu Pro Ser Asn Trp Thr Gly Thr Cys Thr Ile Gly
 305 310 315 320
 Tyr Val Thr Pro Asp Ile Phe Ile Ala Pro Gly Asn Leu Ser Leu Pro
 325 330 335
 Ile Pro Ile Tyr Gly Asn Ser Pro Leu Pro Arg Val Arg Arg Ala Ile
 340 345 350
 His Phe Ile Pro Leu Leu Ala Gly Leu Gly Ile Leu Ala Gly Thr Gly

355	360	365
Thr Gly Ile Ala Gly Ile Thr Lys Ala Ser Leu Thr Tyr Ser Gln Leu		
370	375	380
Ser Lys Glu Ile Ala Asn Asn Ile Asp Thr Met Ala Lys Ala Leu Thr		
385	390	395
Thr Met Gln Glu Gln Ile Asp Ser Leu Ala Ala Val Val Leu Gln Asn		
405	410	415
Arg Arg Gly Leu Asp Met Leu Thr Ala Ala Gln Gly Gly Ile Cys Leu		
420	425	430
Ala Leu Asp Glu Lys Cys Cys Phe Trp Val Asn Gln Ser Gly Lys Val		
435	440	445
Gln Asp Asn Ile Arg Gln Leu Leu Asn Gln Ala Ser Ser Leu Arg Glu		
450	455	460
Arg Ala Thr Gln Gly Trp Leu Asn Trp Glu Gly Thr Trp Lys Trp Phe		
465	470	475
Ser Trp Val Leu Pro Leu Thr Gly Pro Leu Val Ser Leu Leu Leu		
485	490	495
Leu Leu Phe Gly Pro Cys Leu Leu Asn Leu Ile Thr Gln Phe Val Ser		
500	505	510
Ser Arg Leu Gln Ala Ile Lys Leu Gln Thr Asn Leu Ser Ala Gly Arg		
515	520	525
His Pro Arg Asn Ile Gln Glu Ser Pro Phe		
530	535	

<210> 3380

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3380

Met Ala Thr Thr Ile Ser Lys Leu Lys Val Asp Leu Asp Phe Asp Ser
 1 5 10 15
 Ser Ser Ile Ser Gln Ile His Leu Val Leu Phe Gly Phe Gln Asp Ala
 20 25 30
 Val Asn Lys Ile Leu Arg Asn His Leu Ile Arg Pro His Trp Met Phe
 35 40 45
 Ala Met Asp Asn Ile Ile Arg Arg Ala Val Gln Ala Ala Val Thr Ile
 50 55 60
 Leu Ile Pro Glu Leu Arg Ala His Phe Glu Pro Thr Cys Glu Thr Glu
 65 70 75 80
 Gly Val Asp Lys Asp Met Asp Glu Ala Glu Glu Gly Tyr Pro Pro Ala
 85 90 95
 Thr Gly Pro Gly Gln Glu Ala Gln Pro His Gln Gln His Leu Ser Leu
 100 105 110
 Gln Leu Gly Glu Leu Arg Gln Glu Thr Asn Arg Leu Leu Glu His Leu
 115 120 125
 Val Glu Lys Glu Arg Glu Tyr Gln Asn Leu Leu Arg Gln Thr Leu Glu
 130 135 140
 Gln Lys Thr Gln Glu Leu Tyr His Leu Gln Leu Lys Leu Lys Ser Asn
 145 150 155 160
 Cys Ile Thr Glu Asn Pro Ala Gly Pro Tyr Gly Gln Arg Thr Asp Lys
 165 170 175
 Glu Leu Ile Gly Trp Leu Arg Leu Gln Gly Ala Asp Ala Lys Thr Ile
 180 185 190
 Glu Lys Ile Val Glu Glu Gly Tyr Thr Leu Ser Asp Ile Leu Asn Glu
 195 200 205
 Ile Thr Lys Glu Asp Leu Arg Tyr Leu Arg Leu Arg Gly Gly Leu Leu

210	215	220	
Cys Arg Leu Trp Ser Ala Val Ser Gln Tyr Arg Arg Ala Gln Glu Ala			
225	230	235	240
Ser Glu Thr Lys Asp Lys Ala			
245			

<210> 3381

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3381

Met Glu Glu Val Arg Glu Gly His Ala Leu Gly Gly Met Glu Ala			
---	--	--	--

1	5	10	15
---	---	----	----

Asp Gly Pro Ala Ser Leu Gln Glu Leu Pro Pro Ser Pro Arg Ser Pro			
---	--	--	--

20	25	30	
----	----	----	--

Ser Pro Pro Pro Ser Pro Pro Leu Pro Ser Pro Pro Ser Leu Pro			
---	--	--	--

35	40	45	
----	----	----	--

Ser Pro Ala Ala Pro Glu Ala Pro Glu Leu Pro Glu Pro Ala Gln Pro			
---	--	--	--

50	55	60	
----	----	----	--

Ser Glu Ala His Ala Arg Gln Leu Leu Leu Glu Glu Trp Gly Pro Leu			
---	--	--	--

65	70	75	80
----	----	----	----

Ser Gly Gly Leu Glu Leu Pro Gln Arg Leu Thr Trp Lys Leu Leu Leu			
---	--	--	--

85	90	95	
----	----	----	--

Leu Arg Arg Pro Leu Tyr Arg Asn Leu Leu Arg Ser Pro Asn Pro Glu			
---	--	--	--

100	105	110	
-----	-----	-----	--

Gly Ile Asn Ile Tyr Glu Pro Ala Pro Pro Thr Gly Pro Thr Gln Arg			
---	--	--	--

115	120	125	
-----	-----	-----	--

Pro Leu Glu Thr Leu Gly Asn Phe Arg Gly Trp Tyr Ile Arg Thr Glu
 130 135 140
 Lys Leu Gln Gln Asn Gln Ser Trp Thr Val Lys Gln Gln Cys Val Asp
 145 150 155 160
 Leu Leu Ala Glu Gly Leu Trp Glu Glu Leu Leu Asp Asp Glu Gln Pro
 165 170 175
 Ala Ile Thr Val Met Asp Trp Phe Glu Asp Ser Arg Leu Asp Ala Cys
 180 185 190
 Val Tyr Glu Leu His Val Trp Leu Leu Ala Ala Asp Arg Arg Thr Val
 195 200 205
 Ile Ala Gln His His Val Ala Pro Arg Thr Ser Gly Arg Gly Pro Pro
 210 215 220
 Gly Arg Trp Val Gln Val Ser His Val Phe Arg His Tyr Gly Pro Gly
 225 230 235 240
 Val Arg Phe Ile His Phe Leu His Lys Ala Lys Asn Arg Met Glu Pro
 245 250 255
 Gly Gly Leu Arg Arg Thr Arg Val Thr Asp Ser Ser Val Ser Val Gln
 260 265 270
 Leu Arg Glu
 275

<210> 3382

<211> 452

<212> PRT

<213> Homo sapiens

<400> 3382

Met Lys Val Gln Pro Ser Val Thr Cys Val Ala Ser Trp Gly Gly Ile

1	5	10	15
Val His Leu Glu Ala Phe Gly Asp Pro Val Ile Val Leu Arg Gly Ala			
20	25	30	
Trp Ala Val Pro Arg Val Asp Cys Leu Ile Asp Thr Leu Arg Thr Pro			
35	40	45	
Asn Ala Ser Cys Met Arg Lys Gly Thr His Leu Leu Val Pro Cys Leu			
50	55	60	
Glu Glu Glu Leu Ala Leu His Arg Arg Arg Leu Asp Met Ser Glu			
65	70	75	80
Ala Leu Pro Cys Pro Gly Lys Glu Thr Pro Thr Pro Gly Cys Arg Leu			
85	90	95	
Gly Ala Leu Tyr Trp Ala Cys Val His Asn Asp Pro Thr Gln Leu Gln			
100	105	110	
Ala Ile Leu Asp Gly Gly Val Ser Pro Glu Glu Ala Thr Gln Val Asp			
115	120	125	
Ser Asn Gly Arg Thr Gly Leu Met Val Ala Cys Phe His Gly Phe Gln			
130	135	140	
Ser Val Val Ala Leu Leu Ser His Cys Pro Phe Leu Asp Val Asn Gln			
145	150	155	160
Gln Asp Lys Gly Gly Asp Thr Ala Leu Met Leu Ala Ala Gln Ala Gly			
165	170	175	
His Val Pro Leu Val Ser Leu Leu Asn Tyr Tyr Val Gly Leu Asp			
180	185	190	
Leu Glu Arg Arg Asp Gln Arg Gly Leu Thr Ala Leu Met Lys Ala Ala			
195	200	205	
Met Arg Asn Arg Cys Ala Asp Leu Thr Ala Val Asp Pro Val Arg Gly			
210	215	220	
Lys Thr Ala Leu Glu Trp Ala Val Leu Thr Asp Ser Phe Asp Thr Val			
225	230	235	240

Trp Arg Ile Arg Gln Leu Leu Arg Arg Pro Gln Val Glu Gln Leu Ser
 245 250 255
 Arg His Tyr Lys Pro Glu Trp Pro Ala Leu Ser Gly Leu Val Ala Gln
 260 265 270
 Ala Gln Ala Gln Ala Gln Val Ala Pro Ser Leu Leu Glu Arg Leu Gln
 275 280 285
 Ala Thr Leu Ser Leu Pro Phe Ala Pro Ser Pro Gln Glu Gly Gly Val
 290 295 300
 Leu Asp His Leu Val Thr Ala Thr Thr Ser Leu Ala Ser Pro Phe Val
 305 310 315 320
 Thr Thr Ala Cys His Thr Leu Cys Pro Asp His Pro Pro Ser Leu Gly
 325 330 335
 Thr Arg Ser Lys Ser Val Pro Glu Leu Leu Gly Thr Ala Pro Pro Pro
 340 345 350
 Pro Leu Val Pro Gln Ser Pro Pro Gly Ser Pro Gln Arg Ser Pro Trp
 355 360 365
 Val Phe Val Pro Tyr Gln Ser Pro Gln Gly Ile Leu Ser Lys Cys Leu
 370 375 380
 Gln Trp Leu Gln Pro Arg Asp Ser Thr Ser Pro Arg Pro Gln Val Pro
 385 390 395 400
 Lys Ile Leu Leu Ser Lys Ala Ser Ser Ser His Gln Cys Gln Pro
 405 410 415
 Lys Pro Ser Pro Ser Gly His Gln Ser Leu Ala Leu Pro Leu Trp Arg
 420 425 430
 Tyr Gln Glu Leu Arg Ile Glu Lys Arg Lys Gln Glu Glu Ala Arg
 435 440 445
 Met Ala Gln Lys
 450

<210> 3383

<211> 409

<212> PRT

<213> Homo sapiens

<400> 3383

Met Val Glu Leu Phe Ile Phe Leu Phe Leu Leu Gly Glu Thr Pro Phe

1 5 10 15

Lys Val Val Val Lys Ser Leu Ser Pro Lys Glu Leu Val Arg Ile His

20 25 30

Val Pro Lys Pro Leu Asp Arg Asn Asp Gly Thr Phe Leu Met Arg Tyr

35 40 45

Arg Met Tyr Glu Thr Val Asp Glu Gly Leu Lys Ile Glu Val Leu Tyr

50 55 60

Gly Asp Glu His Val Ala Gln Ser Pro Tyr Ile Leu Lys Gly Pro Val

65 70 75 80

Tyr His Glu Tyr Cys Glu Cys Pro Glu Asp Pro Gln Ala Trp Gln Lys

85 90 95

Thr Leu Ser Cys Pro Thr Lys Glu Pro Gln Ile Ala Lys Asp Phe Ala

100 105 110

Ser Phe Pro Ser Ile Asn Leu Gln Gln Met Leu Lys Glu Val Pro Lys

115 120 125

Arg Phe Gly Asp Glu Arg Gly Ala Ile Val His Tyr Thr Ile Leu Asn

130 135 140

Asn His Val Tyr Arg Arg Ser Leu Gly Lys Tyr Thr Asp Phe Lys Met

145 150 155 160

Phe Ser Asp Glu Ile Leu Leu Ser Leu Thr Arg Lys Val Leu Leu Pro

165 170 175

Asp Leu Glu Phe Tyr Val Asn Leu Gly Asp Trp Pro Leu Glu His Arg
 180 185 190
 Lys Val Asn Gly Thr Pro Ser Pro Ile Pro Ile Ile Ser Trp Cys Gly
 195 200 205
 Ser Leu Asp Ser Arg Asp Val Val Leu Pro Thr Tyr Asp Ile Thr His
 210 215 220
 Ser Met Leu Glu Ala Met Arg Gly Val Thr Asn Asp Leu Leu Ser Ile
 225 230 235 240
 Gln Gly Asn Thr Gly Pro Ser Trp Ile Asn Lys Thr Glu Arg Ala Phe
 245 250 255
 Phe Arg Gly Arg Asp Ser Arg Glu Glu Arg Leu Gln Leu Val Gln Leu
 260 265 270
 Ser Lys Glu Asn Pro Gln Leu Leu Asp Ala Gly Ile Thr Gly Tyr Phe
 275 280 285
 Phe Phe Gln Glu Lys Glu Leu Gly Lys Ala Lys Leu Met Gly
 290 295 300
 Phe Phe Asp Phe Phe Lys Tyr Lys Tyr Gln Val Asn Val Asp Gly Thr
 305 310 315 320
 Val Ala Ala Tyr Arg Tyr Pro Tyr Leu Met Leu Gly Asp Ser Leu Val
 325 330 335
 Leu Lys Gln Asp Ser Pro Tyr Tyr Glu His Phe Tyr Met Ala Leu Glu
 340 345 350
 Pro Trp Lys His Tyr Val Pro Ile Lys Arg Asn Leu Ser Asp Leu Leu
 355 360 365
 Glu Lys Val Lys Trp Ala Lys Ser Phe Thr Leu Ser Pro Arg Leu Glu
 370 375 380
 Cys Ser Gly Thr Ile Ser Thr His Cys Asn Leu Cys Leu Pro Gly Ser
 385 390 395 400
 Arg Asn Phe Val Pro Gln Pro Pro Glu

405

<210> 3384

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3384

Met Arg Lys Pro Arg Glu Met Arg Gly Leu Ala Gln Gly Arg Gly Val

1

5

10

15

His Ser Gln Leu Cys Leu Leu Leu Thr Gln Asn Lys Asp Leu Gly Thr

20

25

30

Pro Arg Gly Ser Trp Pro Ser Gly Met Asp Ser Trp His Leu Arg Ala

35

40

45

Ser Arg Leu Gln Pro Ser Gly Ser His Gly Cys Pro Lys Ser Ser Gly

50

55

60

Pro Leu Leu Gly Ser Trp Leu Gly Cys Leu Ala Leu Pro Asp Arg Arg

65

70

75

80

Leu Leu Gly Ser Cys Leu Leu Gly Asp Ala Ser Cys Arg Ser Trp Cys

85

90

95

Gly Gly Gly Gln Gly Gly Gly Phe Phe Leu Ser Leu Ser Leu Ser

100

105

110

Ser Thr Phe Ser Pro Leu Pro Arg Gly Asn Gly Ser Arg Ile Ser Phe

115

120

125

Lys Arg Met Leu Leu Tyr Phe Ala Ser Gly Trp Lys Val Ala Val Leu

130

135

140

Ala Pro Val Ser Cys Thr Trp Thr Pro Val

145

150

<210> 3385

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3385

Met Val His Ala Cys Gln Val Ser Ser Glu Cys Ser Gly Cys Leu Arg
1 5 10 15
Gly Gly Glu Glu Gly Met Pro Trp Leu Leu Pro Pro Leu Cys His His
20 25 30
Leu Pro Ala His Leu Gly Leu Lys Ser Val Trp Thr Ala Glu Ser Val
35 40 45
Ser Glu Lys Pro Val Leu Gly Gln Glu Leu Gly Asn Arg Ala Val Lys
50 55 60
Glu Val Gln Ser Gly Glu Glu Arg Arg Lys Leu Asp Leu Gly Thr Asp
65 70 75 80
Arg Ile Pro Gln Ala Cys Ser Thr Ser Gln Pro Leu Tyr Ala Pro Thr
85 90 95
Leu Gly Leu Trp Thr Gly Phe Met Phe Cys Leu Ile Ser Val Pro Glu
100 105 110
Ala Glu Met Gly Met Val Glu Arg Ser Ser Thr Gln Val Ala Pro Gly
115 120 125
Met Gly Met Ser Thr Pro Tyr Ser Pro Cys Val Ser Ser
130 135 140

<210> 3386

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3386

Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln His

1 5 10 15

Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu Leu

20 25 30

Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu Ser

35 40 45

Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe Leu

50 55 60

Ala Leu Val Glu Glu Val Glu Asp Arg Gly Thr Val Val Ala Gln Gly

65 70 75 80

Gly Gly Arg Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp Val Gly

85 90 95

Gln Thr Lys Ala Ala Gln Ala Leu Ala Lys Leu Thr Ile Thr Ser Asn

100 105 110

Pro Glu Met Thr Phe Pro Gly Glu Arg Ile Tyr Glu Val Val Arg Pro

115 120 125

Leu Val Ser Leu Leu His Leu Asn Cys Ser Gly Leu Gln Asn Phe Glu

130 135 140

Ala Leu Met Ala Leu Thr Asn Leu Ala Gly Ile Ser Glu Arg Leu Arg

145 150 155 160

Gln Lys Ile Leu Lys Glu Lys Ala Val Pro Met Ile Glu Gly Tyr Met

165 170 175

Phe Glu Glu His Glu Met Ile Arg Arg Ala Ala Thr Glu Cys Met Cys

180 185 190

Asn Leu Ala Met Ser Lys Glu Val Gln Asp Leu Phe Glu Ala Gln Gly
 195 200 205
 Asn Asp Arg Leu Lys Leu Leu Val Leu Tyr Ser Gly Glu Asp Asp Glu
 210 215 220
 Leu Leu Gln Arg Ala Ala Gly Gly Leu Ala Met Leu Thr Ser Met
 225 230 235 240
 Arg Pro Thr Leu Cys Ser Arg Ile Pro Gln Val Thr Thr His Trp Leu
 245 250 255
 Glu Ile Leu Gln Ala Leu Leu Leu Ser Ser Asn Gln Glu Leu Gln His
 260 265 270
 Arg Gly Ala Val Val Val Leu Asn Met Val Glu Ala Ser Arg Glu Ile
 275 280 285
 Ala Ser Thr Leu Met Glu Ser Glu Met Met Glu Ile Leu Ser Val Leu
 290 295 300
 Ala Lys Gly Asp His Ser Pro Val Thr Arg Ala Ala Ala Cys Leu
 305 310 315 320
 Asp Lys Ala Val Glu Tyr Gly Leu Ile Gln Pro Asn Gln Asp Gly Glu
 325 330 335

<210> 3387

<211> 1088

<212> PRT

<213> Homo sapiens

<400> 3387

Met Ala Asn Gly Thr Ala Asp Val Arg Lys Leu Phe Ile Phe Thr Thr
 1 5 10 15
 Thr Gln Asn Tyr Phe Gly Leu Met Ser Glu Leu Trp Asp Gln Pro Leu

20	25	30
Leu Cys Asn Cys Leu Glu Ile Asn Asn Phe Leu Asp Asp Gly Asn Gln		
35	40	45
Met Leu Leu Arg Val Gln Arg Ser Asp Ala Gly Ile Ser Phe Ser Asn		
50	55	60
Thr Ile Glu Phe Gly Asp Thr Lys Asp Lys Val Leu Val Phe Phe Lys		
65	70	75
Leu Arg Pro Glu Val Ile Thr Asp Glu Asn Leu His Asp Asn Ile Leu		
85	90	95
Val Ser Ser Met Leu Glu Ser Pro Ile Ser Ser Leu Tyr Gln Ala Val		
100	105	110
Arg Gln Val Phe Ala Pro Met Leu Leu Lys Asp Gln Glu Trp Ser Arg		
115	120	125
Asn Phe Asp Pro Lys Leu Gln Asn Leu Leu Ser Glu Leu Glu Ala Gly		
130	135	140
Leu Gly Ile Val Leu Arg Arg Ser Asp Thr Asn Leu Thr Lys Leu Lys		
145	150	155
Phe Lys Glu Asp Asp Thr Arg Gly Ile Leu Thr Pro Ser Asp Glu Phe		
165	170	175
Gln Phe Trp Ile Glu Gln Ala His Arg Gly Asn Lys Gln Ile Ser Lys		
180	185	190
Glu Arg Ala Asn Tyr Phe Lys Glu Leu Phe Glu Thr Ile Ala Arg Glu		
195	200	205
Phe Tyr Asn Leu Asp Ser Leu Ser Leu Leu Glu Val Val Asp Leu Val		
210	215	220
Glu Thr Thr Gln Asp Val Val Asp Asp Val Trp Arg Gln Thr Glu His		
225	230	235
Asp His Tyr Pro Glu Ser Arg Met Leu His Leu Leu Asp Ile Ile Gly		
245	250	255

Gly Ser Phe Gly Arg Phe Val Gln Lys Lys Leu Gly Thr Leu Asn Leu
 260 265 270
 Trp Glu Asp Pro Tyr Tyr Leu Val Lys Glu Ser Leu Lys Ala Gly Ile
 275 280 285
 Ser Ile Cys Glu Gln Trp Val Ile Val Cys Asn His Leu Thr Gly Gln
 290 295 300
 Val Trp Gln Arg Tyr Val Pro His Pro Trp Lys Asn Glu Lys Tyr Phe
 305 310 315 320
 Pro Glu Thr Leu Asp Lys Leu Gly Lys Arg Leu Glu Glu Val Leu Ala
 325 330 335
 Ile Arg Thr Ile His Glu Lys Phe Leu Tyr Phe Leu Pro Ala Ser Glu
 340 345 350
 Glu Lys Ile Ile Cys Leu Thr Arg Val Phe Glu Pro Phe Thr Gly Leu
 355 360 365
 Asn Pro Val Gln Tyr Asn Pro Tyr Thr Glu Pro Leu Trp Lys Ala Ala
 370 375 380
 Val Ser Gln Tyr Glu Lys Ile Ile Ala Pro Ala Glu Gln Lys Ile Ala
 385 390 395 400
 Gly Lys Leu Lys Asn Tyr Ile Ser Glu Ile Gln Asp Ser Pro Gln Gln
 405 410 415
 Leu Leu Gln Ala Phe Leu Lys Tyr Lys Glu Leu Val Lys Arg Pro Thr
 420 425 430
 Ile Ser Lys Glu Leu Met Leu Glu Arg Glu Thr Leu Leu Ala Arg Leu
 435 440 445
 Val Asp Ser Ile Lys Asp Phe Arg Leu Asp Phe Glu Asn Arg Cys Arg
 450 455 460
 Gly Ile Pro Gly Asp Ala Ser Gly Pro Leu Ser Gly Lys Asn Leu Ser
 465 470 475 480
 Glu Val Val Asn Ser Ile Val Trp Val Arg Gln Leu Glu Leu Lys Val

485	490	495
Asp Asp Thr Ile Lys Ile Ala Glu Ala Leu Leu Ser Asp Leu Pro Gly		
500	505	510
Phe Arg Cys Phe His Gln Ser Ala Lys Asp Leu Leu Asp Gln Leu Lys		
515	520	525
Leu Tyr Glu Gln Glu Gln Phe Asp Asp Trp Ser Arg Asp Ile Gln Ser		
530	535	540
Gly Leu Ser Asp Ser Arg Ser Gly Leu Cys Ile Glu Ala Ser Ser Arg		
545	550	555
Ile Met Glu Leu Asp Ser Asn Asp Gly Leu Leu Lys Val His Tyr Ser		
565	570	575
Asp Arg Leu Val Ile Leu Leu Arg Glu Val Arg Gln Leu Ser Ala Leu		
580	585	590
Gly Phe Val Ile Pro Ala Lys Ile Gln Gln Val Ala Asn Ile Ala Gln		
595	600	605
Lys Phe Cys Lys Gln Ala Ile Ile Leu Lys Gln Val Ala His Phe Tyr		
610	615	620
Asn Ser Ile Asp Gln Gln Met Ile Gln Ser Gln Arg Pro Met Met Leu		
625	630	635
Gln Ser Ala Leu Ala Phe Glu Gln Ile Ile Lys Asn Ser Lys Ala Gly		
645	650	655
Ser Gly Gly Lys Ser Gln Ile Thr Trp Asp Asn Pro Lys Glu Leu Glu		
660	665	670
Gly Tyr Ile Gln Lys Leu Gln Asn Ala Ala Glu Arg Leu Ala Thr Glu		
675	680	685
Asn Arg Lys Leu Arg Lys Trp His Thr Thr Phe Cys Glu Lys Val Val		
690	695	700
Val Leu Met Asn Ile Asp Leu Leu Arg Gln Gln Gln Arg Trp Lys Asp		
705	710	715
720		

Gly Leu Gln Glu Leu Arg Thr Gly Leu Ala Thr Val Glu Ala Gln Gly
 725 730 735
 Phe Gln Ala Ser Asp Met His Ala Trp Lys Gln His Trp Asn His Gln
 740 745 750
 Leu Tyr Lys Ala Leu Glu His Gln Tyr Gln Met Gly Leu Glu Ala Leu
 755 760 765
 Asn Glu Asn Leu Pro Glu Ile Asn Ile Asp Leu Thr Tyr Lys Gln Gly
 770 775 780
 Arg Leu Gln Phe Arg Pro Pro Phe Glu Glu Ile Arg Ala Lys Tyr Tyr
 785 790 795 800
 Arg Glu Met Lys Arg Phe Ile Gly Ile Pro Asn Gln Phe Lys Gly Val
 805 810 815
 Gly Glu Ala Gly Asp Glu Ser Ile Phe Ser Ile Met Ile Asp Arg Asn
 820 825 830
 Ala Ser Gly Phe Leu Thr Ile Phe Ser Lys Ala Glu Asp Leu Phe Arg
 835 840 845
 Arg Leu Ser Ala Val Leu His Gln His Lys Glu Trp Ile Val Ile Gly
 850 855 860
 Gln Val Asp Met Glu Ala Leu Val Glu Lys His Leu Phe Thr Val His
 865 870 875 880
 Asp Trp Glu Lys Asn Phe Lys Ala Leu Lys Ile Lys Gly Lys Glu Val
 885 890 895
 Glu Arg Leu Pro Ser Ala Val Lys Val Asp Cys Leu Asn Ile Asn Cys
 900 905 910
 Asn Pro Val Lys Thr Val Ile Asp Asp Leu Ile Gln Lys Leu Phe Asp
 915 920 925
 Leu Leu Val Leu Ser Leu Lys Lys Ser Ile Gln Ala His Leu His Glu
 930 935 940
 Ile Asp Thr Phe Val Thr Glu Ala Met Glu Val Leu Thr Ile Met Pro

945	950	955	960
Gln Ser Val Glu Glu Ile Gly Asp Ala Asn Leu Gln Tyr Ser Lys Leu			
965	970	975	
Gln Glu Arg Lys Pro Glu Ile Leu Pro Leu Phe Gln Glu Ala Glu Asp			
980	985	990	
Lys Asn Arg Leu Leu Arg Thr Val Ala Gly Gly Leu Glu Thr Ile			
995	1000	1005	
Ser Asn Leu Lys Ala Lys Trp Asp Lys Phe Glu Leu Met Met Glu Ser			
1010	1015	1020	
His Gln Leu Met Ile Lys Asp Gln Ile Glu Val Met Lys Gly Asn Val			
1025	1030	1035	1040
Lys Ser Arg Leu Gln Ile Tyr Tyr Gln Glu Leu Glu Lys Phe Lys Ala			
1045	1050	1055	
Arg Trp Asp Gln Leu Lys Pro Gly Asp Asp Val Ile Glu Thr Gly Gln			
1060	1065	1070	
His Asn Thr Leu Asp Lys Ser Ala Lys Leu Ile Lys Glu Lys Lys Ile			
1075	1080	1085	

<210> 3388

<211> 352

<212> PRT

<213> Homo sapiens

<400> 3388

Met Leu Leu Pro Asp Asp Phe Lys Ala Ser Ser Lys Ile Lys Val Asn

1 5 10 15

Asn His Leu Phe His Arg Glu Asn Leu Pro Ser His Phe Lys Phe Lys

20 25 30

Glu Tyr Cys Pro Gln Val Phe Arg Asn Leu Arg Asp Arg Phe Gly Ile
 35 40 45
 Asp Asp Gln Asp Tyr Leu Val Thr Leu Thr Arg Asn Pro Pro Ser Glu
 50 55 60
 Ser Glu Gly Ser Asp Gly Arg Phe Leu Ile Ser Tyr Asp Arg Thr Leu
 65 70 75 80
 Val Ile Lys Glu Val Ser Ser Glu Asp Ile Ala Asp Met His Ser Asn
 85 90 95
 Leu Ser Asn Tyr His Gln Tyr Ile Val Lys Cys His Gly Asn Thr Leu
 100 105 110
 Leu Pro Gln Phe Leu Gly Met Tyr Arg Val Ser Val Asp Asn Glu Asp
 115 120 125
 Ser Tyr Met Leu Val Met Arg Asn Met Phe Ser His Arg Leu Pro Val
 130 135 140
 His Arg Lys Tyr Asp Leu Lys Gly Ser Leu Val Ser Arg Glu Ala Ser
 145 150 155 160
 Asp Lys Glu Lys Val Lys Glu Leu Pro Thr Leu Lys Asp Met Asp Phe
 165 170 175
 Leu Asn Lys Asn Gln Lys Val Tyr Ile Gly Glu Glu Lys Lys Ile
 180 185 190
 Phe Leu Glu Lys Leu Lys Arg Asp Val Glu Phe Leu Val Gln Leu Lys
 195 200 205
 Ile Met Asp Tyr Ser Leu Leu Leu Gly Ile His Asp Ile Ile Arg Gly
 210 215 220
 Ser Glu Pro Glu Glu Glu Ala Pro Val Arg Glu Asp Glu Ser Glu Val
 225 230 235 240
 Asp Gly Asp Cys Ser Leu Thr Gly Pro Pro Ala Leu Val Gly Ser Tyr
 245 250 255
 Gly Thr Ser Pro Glu Gly Ile Gly Gly Tyr Ile His Ser His Arg Pro

260	265	270
Leu Gly Pro Gly Glu Phe Ser Phe Ile Asp Val Tyr Ala Ile Arg		
275	280	285
Ser Ala Glu Gly Ala Pro Gln Lys Glu Val Tyr Phe Met Gly Leu Ile		
290	295	300
Asp Ile Leu Thr Gln Tyr Asp Ala Lys Lys Ala Ala His Ala Ala		
305	310	315
Lys Thr Val Lys His Gly Ala Gly Ala Glu Ile Ser Thr Val His Pro		
325	330	335
Glu Gln Tyr Ala Lys Arg Phe Leu Asp Phe Ile Thr Asn Ile Phe Ala		
340	345	350

<210> 3389

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3389

Met Gln Pro Arg Ser Arg Trp Gln Ala Gln Asn Ser Glu Thr Lys Ser			
1	5	10	15
His Gly Ala Lys Val Arg His Ala Phe Leu Ala His Leu Cys Val Lys			
20	25	30	
Lys Val Thr Gly Met Leu Thr Thr Gln Val Leu Gly Val Arg Pro Gly			
35	40	45	
Gln Arg Arg Gly Pro Cys Cys Ser Arg Ile Asp Arg Gln Leu Ala Ser			
50	55	60	
Lys Leu Gly Ala Gln Arg Gln Arg Leu Pro Ile His Leu Ser Thr Leu			
65	70	75	80

Leu Ser His Leu Phe Pro Lys Asp Asp Pro Lys Ala Leu His Ser Ile
 85 90 95
 Phe Gln Arg Asp Met Gly Val Glu Gly Met Glu Val Leu Ser His Leu
 100 105 110
 Leu Leu Leu His Leu Glu Ala Pro Arg Ser Thr Asp Thr Asp His Pro
 115 120 125
 Leu Ser Val Lys Asn Val Leu Phe Gln Glu Ala Pro Gln Leu Arg Leu
 130 135 140
 Lys Glu Thr Ala Pro Pro Pro Gly
 145 150

<210> 3390

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3390

Met Ala Cys Pro Ser Pro Val Ser Arg Arg Leu Ala Arg Ser Thr Leu
 1 5 10 15

Leu Leu Ile Pro Leu Phe Gly Val His Tyr Ile Met Phe Ala Phe Phe

 20 25 30

Pro Asp Asn Phe Lys Pro Glu Val Lys Met Val Phe Glu Leu Val Val

 35 40 45

Gly Ser Phe Gln Gly Phe Val Val Ala Ile Leu Tyr Cys Phe Leu Asn

 50 55 60

Gly Glu Val Gln Ala Glu Leu Arg Arg Lys Trp Arg Arg Trp His Leu

 65 70 75 80

Gln Gly Val Leu Gly Trp Asn Pro Lys Tyr Arg His Pro Ser Gly Gly

85	90	95
Ser Asn Gly Ala Thr Cys Ser Thr Gln Val Ser Met Leu Thr Arg Val		
100	105	110
Ser Pro Gly Ala Arg Arg Ser Ser Phe Gln Ala Glu Val Ser Leu		
115	120	125
Val		

<210> 3391

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3391

Met	Gly	Met	Lys	Arg	Glu	His	Phe	Cys	Tyr	Leu	Pro	Asn	Ser	Trp	Glu
1		5					10				15				

Pro	Val	Asp	Ser	Leu	His	Pro	Gly	Leu	Ala	Ala	Thr	Gly
	20			25				30				

Leu	Val	Cys	Val	Ser	Ser	Met	Cys	Leu	Phe	Trp	His	Ile	Ser	Lys	Val
		35				40				45					

Arg	Tyr	Ala	Val	Cys	Gly	Leu	Val	Ser	Leu	Ala	Pro	Phe	Ala	Glu	His
		50			55			60							

Asn	Val	Phe	Glu	Val	His	Pro	Phe	Arg	Ser	Phe	Glu	Gly	Cys	Val	Ala
		65			70			75			80				

Phe	His	Gly	Val	Ala	Ile	His	Ser	Cys	Ala	Tyr	Gly	Arg	Leu	Asp	Cys
		85			90			95							

Val	Gln	Phe	Leu	Ala	Thr	Leu	Asn	Lys	Ala	Ser	Val	Asn	Met	Asp	Ser
		100			105			110							

Leu Val Leu Glu Arg Met Tyr Val Leu Ser Leu Leu Cys Arg Cys Leu
 115 120 125
 Gly Val Asp Cys Trp Val Met Trp
 130 135

<210> 3392

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3392

Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe
 1 5 10 15
 Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile
 20 25 30
 Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly
 35 40 45
 Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp
 50 55 60
 His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser
 65 70 75 80
 Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu
 85 90 95
 Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala
 100 105 110
 Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp
 115 120 125
 Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser

130	135	140
Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser		
145	150	155
Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser		
165	170	175
Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala		
180	185	190
Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn		
195	200	205
His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile		
210	215	220
Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser		
225	230	235

<210> 3393

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3393

Met Cys Ala Gln Asn Tyr Val Val Leu Leu Asp Ser Thr Leu Pro Arg

1 5 10 15

Ser Gln Tyr Asp Tyr Ile Leu Pro Gln Val Ser Phe Thr Ala Val Gly

20 25 30

Tyr His Lys His Ile Thr Leu Ile Phe Asn Pro Thr Arg Lys Leu Pro

35 40 45

Glu Gln Asp Ile Ala Gln Gly Ser Tyr Ile Ala Leu Pro Leu Thr Leu

50 55 60

Leu Val Leu Leu Ala Gly Tyr Asn His Asp Lys Leu Ile Pro Leu Leu
 65 70 75 80
 Leu Gln Leu Thr Ser Arg Leu Gln Gly Val Arg Ala Leu Gly Gln Ala
 85 90 95
 Ala Ser Asp Asn Ser Gly Pro Glu Asp Ala Lys Arg Gln Ala Lys Lys
 100 105 110
 Gln Lys Thr Arg Arg Thr
 115

<210> 3394

<211> 548

<212> PRT

<213> Homo sapiens

<400> 3394

Met His Arg Leu Lys Cys Met Val Lys Ala Phe Phe Leu Thr Phe Cys
 1 5 10 15
 Gln Val Ser Ser Glu Asp Arg Ser Ala Leu Trp Ala Leu Val Thr Phe
 20 25 30
 Tyr Gly Gly Asp Cys Gln Leu Thr Leu Asn Lys Cys Thr His Leu
 35 40 45
 Ile Val Pro Glu Pro Lys Gly Glu Lys Tyr Glu Cys Ala Leu Lys Arg
 50 55 60
 Ala Ser Ile Lys Ile Val Thr Pro Asp Trp Val Leu Asp Cys Val Ser
 65 70 75 80
 Glu Lys Thr Lys Lys Asp Glu Ala Phe Tyr His Pro Arg Leu Ile Ile
 85 90 95
 Tyr Glu Glu Glu Glu Glu Glu Glu Glu Glu Val Glu Asn

100	105	110
Glu Glu Gln Asp Ser Gln Asn Glu Gly Ser Thr Asp Glu Lys Ser Ser		
115	120	125
Pro Ala Ser Ser Gln Glu Gly Ser Pro Ser Gly Asp Gln Gln Phe Ser		
130	135	140
Pro Lys Ser Asn Thr Glu Lys Ser Lys Gly Glu Leu Met Phe Asp Asp		
145	150	155
Ser Ser Asp Ser Ser Pro Glu Lys Gln Glu Arg Asn Leu Asn Trp Thr		
165	170	175
Pro Ala Glu Val Pro Gln Leu Ala Ala Lys Arg Arg Leu Pro Gln		
180	185	190
Gly Lys Glu Pro Gly Leu Ile Asn Leu Cys Ala Asn Val Pro Pro Val		
195	200	205
Pro Gly Asn Ile Leu Pro Pro Glu Val Arg Gly Asn Leu Met Ala Ala		
210	215	220
Gly Gln Asn Leu Gln Ser Ser Glu Arg Ser Glu Met Ile Ala Thr Trp		
225	230	235
Ser Pro Ala Val Arg Thr Leu Arg Asn Ile Thr Asn Asn Ala Asp Ile		
245	250	255
Gln Gln Met Asn Arg Pro Ser Asn Val Ala His Ile Leu Gln Thr Leu		
260	265	270
Ser Ala Pro Thr Lys Asn Leu Glu Gln Gln Val Asn His Ser Gln Gln		
275	280	285
Gly His Thr Asn Ala Asn Ala Val Leu Phe Ser Gln Val Lys Val Thr		
290	295	300
Pro Glu Thr His Met Leu Gln Gln Gln Gln Ala Gln Gln Gln Gln		
305	310	315
Gln Gln His Pro Val Leu His Leu Gln Pro Gln Gln Ile Met Gln Leu		
325	330	335

Gln Gln Gln Gln Gln Gln Ile Ser Gln Gln Pro Tyr Pro Gln Gln
 340 345 350
 Pro Pro His Pro Phe Ser Gln Gln Gln Gln Gln Gln Ala His
 355 360 365
 Pro His Gln Phe Ser Gln Gln Gln Leu Gln Phe Pro Gln Gln Gln Leu
 370 375 380
 His Pro Pro Gln Gln Leu His Arg Pro Gln Gln Gln Leu Gln Pro Phe
 385 390 395 400
 Gln Gln Gln His Ala Leu Gln Gln Phe His Gln Leu Gln Gln His
 405 410 415
 Gln Leu Gln Gln Gln Gln Leu Ala Gln Leu Gln Gln His Ser Leu
 420 425 430
 Leu Gln Gln Gln Gln Gln Gln Ile Gln Gln Gln Leu Gln Arg
 435 440 445
 Met His Gln Gln Gln Gln Gln Gln Met Gln Ser. Gln Thr Ala Pro
 450 455 460
 His Leu Ser Gln Thr Ser Gln Ala Leu Gln His Gln Val Pro Pro Gln
 465 470 475 480
 Gln Pro Pro Gln Gln Gln Gln Gln Gln Pro Pro Pro Ser Pro Gln
 485 490 495
 Gln His Gln Leu Phe Gly His Asp Pro Ala Val Glu Ile Pro Glu Glu
 500 505 510
 Gly Phe Leu Leu Gly Cys Val Phe Ala Ile Ala Asp Tyr Pro Glu Gln
 515 520 525
 Met Ser Asp Lys Gln Leu Leu Ala Thr Trp Lys Arg Val Arg Leu Cys
 530 535 540
 Leu Glu Glu Gly
 545

<210> 3395

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3395

Met Gly Ser Leu Met Ala Glu Met Val Val Lys Pro Thr Met Ser Leu

1 5 10 15

Lys Tyr Ser Val Thr Cys Ser Lys Tyr Ser Gly Ser Thr Gly Val Pro

20 25 30

Val Phe Lys Ala Ser Ala Thr Asp Leu Gly Met Ala Gly Ser Glu Val

35 40 45

Thr Trp Gly Pro Leu Tyr Leu Ala Gly Leu Gln Leu Pro Ser Gln Pro

50 55 60

Thr Pro Ser His Trp His Pro Arg Arg Gln His Leu Cys Lys Gln Pro

65 70 75 80

Val Cys Leu Leu Leu Phe Gln Leu Gln Leu Leu Arg Ala Leu Pro Asp

85 90 95

Gln Ile Leu Gln Val Thr Arg Val Leu Leu Gln His Pro Lys His Arg

100 105 110

Val Asn Asp Val Arg Leu Pro Ala Leu Val Asp Val Leu Glu Leu Ala

115 120 125

Val Glu Gly Ser Trp

130

<210> 3396

<211> 548

<212> PRT

<213> Homo sapiens

<400> 3396

Met Gln Pro Gly Leu Ser Pro Gly Ser Pro Gly Asp Pro Arg Pro Pro

1 5 10 15

Thr Pro Glu Thr Asp Tyr Pro Glu Ser Leu Thr Ser Tyr Pro Glu Glu

20 25 30

Asp Tyr Ser Pro Val Gly Ser Phe Gly Glu Pro Gly Pro Thr Ser Pro

35 40 45

Leu Thr Thr Pro Pro Gly Trp Ser Cys His Val Ser Gln Asp Lys Gln

50 55 60

Met Leu Tyr Thr Asn His Phe Thr Gln Glu Gln Trp Val Arg Leu Glu

65 70 75 80

Asp Pro His Gly Lys Pro Tyr Phe Tyr Asn Pro Glu Asp Ser Ser Val

85 90 95

Arg Trp Glu Leu Pro Gln Val Pro Val Pro Ala Pro Arg Ser Ile His

100 105 110

Lys Ser Ser Gln Asp Gly Asp Thr Pro Ala Gln Ala Ser Pro Pro Glu

115 120 125

Glu Lys Val Pro Ala Glu Leu Asp Glu Val Gly Ser Trp Glu Glu Val

130 135 140

Ser Pro Ala Thr Ala Ala Val Arg Thr Lys Thr Leu Asp Lys Ala Gly

145 150 155 160

Val Leu His Arg Thr Lys Thr Ala Asp Lys Gly Lys Arg Leu Arg Lys

165 170 175

Lys His Trp Ser Ala Ser Trp Thr Val Leu Glu Gly Gly Val Leu Thr

180 185 190

Phe Phe Lys Asp Ser Lys Thr Ser Ala Ala Gly Gly Leu Arg Gln Pro

195	200	205
Ser Lys Phe Ser Thr Pro Glu Tyr Thr Val Glu Leu Arg Gly Ala Thr		
210	215	220
Leu Ser Trp Ala Pro Lys Asp Lys Ser Ser Arg Lys Asn Val Leu Glu		
225	230	235
Leu Arg Ser Arg Asp Gly Ser Glu Tyr Leu Ile Gln His Asp Ser Glu		
245	250	255
Ala Ile Ile Ser Thr Trp His Lys Ala Ile Ala Gln Gly Ile Gln Glu		
260	265	270
Leu Ser Ala Glu Leu Pro Pro Glu Glu Ser Glu Ser Ser Arg Val Asp		
275	280	285
Phe Gly Ser Ser Glu Arg Leu Gly Ser Trp Gln Glu Lys Glu Glu Asp		
290	295	300
Ala Arg Pro Asn Ala Ala Ala Pro Ala Leu Gly Pro Val Gly Leu Glu		
305	310	315
Ser Asp Leu Ser Lys Val Arg His Lys Leu Arg Lys Phe Leu Gln Arg		
325	330	335
Arg Pro Thr Leu Gln Ser Leu Arg Glu Lys Gly Tyr Ile Lys Asp Gln		
340	345	350
Val Phe Gly Cys Ala Leu Ala Leu Cys Glu Arg Glu Arg Ser Arg		
355	360	365
Val Pro Arg Phe Val Gln Gln Cys Ile Arg Ala Val Glu Ala Arg Gly		
370	375	380
Leu Asp Ile Asp Gly Leu Tyr Arg Ile Ser Gly Asn Leu Ala Thr Ile		
385	390	395
Gln Lys Leu Arg Tyr Lys Val Asp His Asp Glu Arg Leu Asp Leu Asp		
405	410	415
Asp Gly Arg Trp Glu Asp Val His Val Ile Thr Gly Ala Leu Lys Leu		
420	425	430

Phe Phe Arg Glu Leu Pro Glu Pro Leu Phe Pro Ser His Phe Arg
 435 440 445
 Gln Phe Ile Ala Ala Ile Lys Leu Gln Asp Gln Ala Arg Arg Ser Arg
 450 455 460
 Cys Val Arg Asp Leu Val Arg Ser Leu Pro Ala Pro Asn His Asp Thr
 465 470 475 480
 Leu Arg Met Leu Phe Gln His Leu Cys Arg Val Ile Glu His Gly Glu
 485 490 495
 Gln Asn Arg Met Ser Val Gln Ser Val Ala Ile Val Phe Gly Pro Thr
 500 505 510
 Leu Leu Arg Pro Glu Val Glu Glu Thr Ser Met Pro Met Thr Met Val
 515 520 525
 Phe Gln Asn Gln Val Val Glu Leu Ile Leu Gln Gln Cys Ala Asp Ile
 530 535 540
 Phe Pro Pro His
 545

<210> 3397

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3397

Met Met Asp Ala Ser Lys Glu Leu Gln Val Leu His Ile Asp Phe Leu
 1 5 10 15
 Asn Gln Asp Asn Ala Val Ser His His Thr Trp Glu Phe Gln Thr Ser
 20 25 30
 Ser Pro Val Phe Arg Arg Gly Gln Val Phe His Leu Arg Leu Val Leu

35	40	45
Asn Gln Pro Leu Gln Ser Tyr His Gln Leu Lys Leu Glu Phe Ser Thr		
50	55	60
Gly Pro Asn Pro Ser Ile Ala Lys His Thr Leu Val Val Leu Asp Pro		
65	70	75
Arg Thr Pro Ser Asp His Tyr Asn Trp Gln Ala Thr Leu Gln Asn Glu		
85	90	95
Ser Gly Lys Glu Val Ser Thr His Trp Ala Gly Gly Trp Ala Gly Trp		
100	105	110
Leu Leu Ala Glu Cys Ser		
115		

<210> 3398

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3398

Met Pro Gly Ala Glu Met Trp Thr Glu Gly Asp Phe Ser Ala Ser Leu			
1	5	10	15
Ala Gly Ala Cys Ser Lys Leu Ala Asp Ala Leu Cys Ala Cys Trp Ala			
20	25	30	
Arg Ser Pro Ser Ser Gly Glu Ala Leu Gly Leu Glu Gln Leu Gly Leu			
35	40	45	
Ser Trp Leu Leu Thr Pro Glu Pro Gly Ser Leu Leu Val Leu His Tyr			
50	55	60	
Leu Ala Thr Ser Ala Gln Gly Pro Asp Lys Arg Tyr Cys Leu Arg Ala			
65	70	75	80

Thr Glu Asp Thr Gly Ala Gln Ser Trp Thr Thr Gly Pro Gly Pro Gly
 85 90 95
 Arg Thr Arg Arg Ser Arg Pro Ser Ala Ala Leu Trp Gly Arg Ser Pro
 100 105 110
 Trp Gly Cys
 115

<210> 3399

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3399

Met Leu Gln Phe Pro Gly Phe Leu Val Leu Ile Ile Pro Pro Arg Ser
 1 5 10 15
 Cys Leu Leu Gln Arg Ser Thr Val Gln Gln Glu Ala Glu Pro Met Pro
 20 25 30
 Leu Arg Gly Trp Arg Tyr Cys Ile Leu Pro Lys Ile Pro Ala Ser His
 35 40 45
 Ser Asn Asn Glu Pro Asn Ser Ala Glu Glu Leu Trp Ala Val Val Ser
 50 55 60
 Lys Thr Gln Ala Tyr Ser Leu Pro Pro Leu Pro Phe Leu Phe Arg Pro
 65 70 75 80
 Val Leu Thr Lys Arg Ile Leu Ala Leu Gln Ile Val Leu Tyr Phe Asp
 85 90 95
 Ala Phe Arg Ile Asn Ile
 100

<210> 3400

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3400

Met Glu Val Val Val Ile His Ser Ser Pro Met Ser Arg Arg Arg Tyr

1 5 10 15

Ser Phe Leu His Leu Trp Glu Cys Gly Ser Gly Trp Leu Pro Val Asp

20 25 30

Ser Pro Pro Arg Thr Gly Leu Gly His Arg Cys Cys Leu Ala Gln Gly

35 40 45

His Val Pro Ser Pro Arg Ser Ser His Thr Lys Trp Leu Ser Cys Val

50 55 60

His Gln Gly Ser Thr Thr Leu Gly Ala Thr Thr Ala Pro Gly Leu Pro

65 70 75 80

Val Gly Trp Leu Gly Pro Leu Leu Cys Met His His Ser Pro Thr Ser

85 90 95

Leu Gly Pro Ile Leu Lys Ala Val Leu His Lys Ala Phe Thr Cys Asn

100 105 110

Leu Arg Ala Ser Glu Ser Val Pro Trp Gly Ser

115 120

<210> 3401

<211> 443

<212> PRT

<213> Homo sapiens

<400> 3401

Met Gly Ser Pro Ala His Arg Pro Ala Leu Leu Leu Leu Pro Pro
 1 5 10 15
 Leu Leu Leu Leu Leu Arg Val Pro Pro Ser Arg Ser Phe Pro Asp
 20 25 30
 Thr Pro Trp Cys Ser Pro Ile Lys Val Lys Tyr Gly Asp Val Tyr Cys
 35 40 45
 Arg Ala Pro Gln Gly Gly Tyr Tyr Lys Thr Ala Leu Gly Thr Arg Cys
 50 55 60
 Asp Ile Arg Cys Gln Lys Gly Tyr Glu Leu His Gly Ser Ser Leu Leu
 65 70 75 80
 Ile Cys Gln Ser Asn Lys Arg Trp Ser Asp Lys Val Ile Cys Lys Gln
 85 90 95
 Lys Arg Cys Pro Thr Leu Ala Met Pro Ala Asn Gly Gly Phe Lys Cys
 100 105 110
 Val Asp Gly Ala Tyr Phe Asn Ser Arg Cys Glu Tyr Tyr Cys Ser Pro
 115 120 125
 Gly Tyr Thr Leu Lys Gly Glu Arg Thr Val Thr Cys Met Asp Asn Lys
 130 135 140
 Ala Trp Ser Gly Arg Pro Ala Ser Cys Val Asp Met Glu Pro Pro Arg
 145 150 155 160
 Ile Lys Cys Pro Ser Val Lys Glu Arg Ile Ala Glu Pro Asn Lys Leu
 165 170 175
 Thr Val Arg Val Ser Trp Glu Thr Pro Glu Gly Arg Asp Thr Ala Asp
 180 185 190
 Gly Ile Leu Thr Asp Val Ile Leu Lys Gly Leu Pro Pro Gly Ser Asn
 195 200 205
 Phe Pro Glu Gly Asp His Lys Ile Gln Tyr Thr Val His Asp Arg Ala

210	215	220
Glu Asn Lys Gly Thr Cys Lys Phe Arg Val Lys Val Arg Val Lys Arg		
225	230	235
Cys Gly Lys Leu Asn Ala Pro Glu Asn Gly Tyr Met Lys Cys Ser Ser		
245	250	255
Asp Gly Asp Asn Tyr Gly Ala Thr Cys Glu Phe Ser Cys Ile Gly Gly		
260	265	270
Tyr Glu Leu Gln Gly Ser Pro Ala Arg Val Cys Gln Ser Asn Leu Ala		
275	280	285
Trp Ser Gly Thr Glu Pro Thr Cys Ala Ala Met Asn Val Asn Val Gly		
290	295	300
Val Arg Thr Ala Ala Ala Leu Leu Asp Gln Phe Tyr Glu Lys Arg Arg		
305	310	315
Leu Leu Ile Val Ser Thr Pro Thr Ala Arg Asn Leu Leu Tyr Arg Leu		
325	330	335
Gln Leu Gly Met Leu Gln Gln Ala Gln Cys Gly Leu Asp Leu Arg His		
340	345	350
Ile Thr Val Val Glu Leu Val Gly Val Phe Pro Thr Leu Ile Gly Arg		
355	360	365
Ile Gly Ala Lys Ile Met Pro Pro Ala Leu Ala Gln Leu Arg Leu		
370	375	380
Leu Leu Arg Ile Pro Leu Tyr Ser Phe Ser Met Val Leu Val Asp Lys		
385	390	395
His Gly Met Asp Lys Glu Arg Tyr Val Ser Leu Val Met Pro Val Ala		
405	410	415
Leu Phe Asn Leu Ile Asp Thr Phe Pro Leu Arg Lys Glu Glu Met Val		
420	425	430
Leu Gln Ala Glu Met Ser Gln Thr Cys Asn Thr		
435	440	

<210> 3402

<211> 555

<212> PRT

<213> Homo sapiens

<400> 3402

Met Gly Lys Trp Arg Pro Gly Gln Gly His Thr Thr Gly Ser Val Lys

1 5 10 15

Pro Leu Ser Arg Ser Asp Ala Met Glu Leu Asp Leu Ser Pro Pro His

20 25 30

Leu Ser Ser Ser Pro Glu Asp Leu Cys Pro Ala Pro Gly Thr Pro Pro

35 40 45

Gly Thr Pro Arg Pro Pro Asp Thr Pro Leu Pro Glu Glu Val Lys Arg

50 55 60

Ser Gln Pro Leu Leu Ile Pro Thr Thr Gly Arg Lys Leu Arg Glu Glu

65 70 75 80

Glu Arg Arg Ala Thr Ser Leu Pro Ser Ile Pro Asn Pro Phe Pro Glu

85 90 95

Leu Cys Ser Pro Pro Ser Gln Ser Pro Ile Leu Gly Gly Pro Ser Ser

100 105 110

Ala Arg Gly Leu Leu Pro Arg Asp Ala Ser Arg Pro His Val Val Lys

115 120 125

Val Tyr Ser Glu Asp Gly Ala Cys Arg Ser Val Glu Val Ala Thr Gly

130 135 140

Ala Thr Ala Arg His Val Cys Glu Met Leu Val Gln Arg Ala His Ala

145 150 155 160

Leu Ser Asp Glu Thr Trp Gly Leu Val Glu Cys His Pro His Leu Ala

	165	170	175												
Leu	Glu	Arg	Gly	Leu	Glu	Asp	His	Glu	Ser	Val	Val	Glu	Val	Gln	Ala
	180				185							190			
Ala	Trp	Pro	Val	Gly	Gly	Asp	Ser	Arg	Phe	Val	Phe	Arg	Lys	Asn	Phe
	195					200						205			
Ala	Lys	Tyr	Glu	Leu	Phe	Lys	Ser	Ser	Pro	His	Ser	Leu	Phe	Pro	Glu
	210				215						220				
Lys	Met	Val	Ser	Ser	Cys	Leu	Asp	Ala	His	Thr	Gly	Ile	Ser	His	Glu
	225				230				235			240			
Asp	Leu	Ile	Gln	Asn	Phe	Leu	Asn	Ala	Gly	Ser	Phe	Pro	Glu	Ile	Gln
	245					250						255			
Gly	Phe	Leu	Gln	Leu	Arg	Gly	Ser	Gly	Arg	Lys	Leu	Trp	Lys	Arg	Phe
	260				265						270				
Phe	Cys	Phe	Leu	Arg	Arg	Ser	Gly	Leu	Tyr	Tyr	Ser	Thr	Lys	Gly	Thr
	275				280						285				
Ser	Lys	Asp	Pro	Arg	His	Leu	Gln	Tyr	Val	Ala	Asp	Val	Asn	Glu	Ser
	290				295					300					
Asn	Val	Tyr	Val	Val	Thr	Gln	Gly	Arg	Lys	Leu	Tyr	Gly	Met	Pro	Thr
	305				310				315			320			
Asp	Phe	Gly	Phe	Cys	Val	Lys	Pro	Asn	Lys	Leu	Arg	Asn	Gly	His	Lys
	325					330						335			
Gly	Leu	Arg	Ile	Phe	Cys	Ser	Glu	Asp	Glu	Gln	Ser	Arg	Thr	Cys	Trp
	340				345						350				
Leu	Ala	Ala	Phe	Arg	Leu	Phe	Lys	Tyr	Gly	Val	Gln	Leu	Tyr	Lys	Asn
	355				360					365					
Tyr	Gln	Gln	Ala	Gln	Ser	Arg	His	Leu	His	Pro	Ser	Cys	Leu	Gly	Ser
	370				375					380					
Pro	Pro	Leu	Arg	Ser	Ala	Ser	Asp	Asn	Thr	Leu	Val	Ala	Met	Asp	Phe
	385				390				395			400			

Ser Gly His Ala Gly Arg Val Ile Glu Asn Pro Arg Glu Ala Leu Ser
 405 410 415
 Val Ala Leu Glu Glu Ala Gln Ala Trp Arg Lys Lys Thr Asn His Arg
 420 425 430
 Leu Ser Leu Pro Met Pro Ala Ser Gly Thr Ser Leu Ser Ala Ala Ile
 435 440 445
 His Arg Thr Gln Leu Trp Phe His Gly Arg Ile Ser Arg Glu Glu Ser
 450 455 460
 Gln Arg Leu Ile Gly Gln Gln Gly Leu Val Asp Gly Leu Phe Leu Val
 465 470 475 480
 Arg Glu Ser Gln Arg Asn Pro Gln Gly Phe Val Leu Ser Leu Cys His
 485 490 495
 Leu Gln Lys Val Lys His Tyr Leu Ile Leu Pro Ser Glu Glu Gly
 500 505 510
 Arg Leu Tyr Phe Ser Met Asp Asp Gly Gln Thr Arg Phe Thr Asp Leu
 515 520 525
 Leu Gln Leu Val Glu Phe His Gln Leu Asn Arg Gly Ile Leu Pro Cys
 530 535 540
 Leu Leu Arg His Cys Cys Thr Arg Val Ala Leu
 545 550 555

<210> 3403

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3403

Met Lys Ser Arg Leu Arg Arg Ser Gln Met Glu Met Arg Asp Leu Leu

1	5	10	15
Gly Pro Gly Val Lys Val Thr Phe Val Arg Thr Leu Trp Leu Glu Thr			
20	25		30
Leu Cys Pro Cys Pro Arg Asn Leu Trp Asn Phe Glu Leu Glu Ser Glu			
35	40	45	
Asp Leu Gly Tyr Leu Ala Glu Glu Ile Ser Lys Gln Gln Ser Val Gln			
50	55	60	
Asp Val Ala Trp Leu Leu Val Val Cys Ala His Ile Cys Glu Gln			
65	70	75	80
Arg His Asp Lys Lys Leu Glu Leu Ile Phe Lys Lys Glu Ala Glu Cys			
85	90		95
Lys Ser Leu Glu Asn Leu Gln Pro Gly His Val Val Glu Lys Lys Lys			
100	105	110	
Asn His Phe Leu Glu Arg Asn Ser Ser			
115	120		

<210> 3404

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3404

Met Pro Leu His Thr Leu Leu Ile Phe Pro Val Met Ser Ser Gly Ala			
1	5	10	15
Leu Leu Leu Ala Val Ala Tyr Lys Ala Ser Trp Ser Gly Ser Lys Ala			
20	25	30	
Trp Gln Ser Leu Ser Gln Gly Lys Leu Gln Ala Ala Asn Ser Pro His			
35	40	45	

Gly Ser Ser Pro Ser Leu Pro Ala Gln Ser Pro Gly Gln Gly Pro Pro
 50 55 60
 Arg Lys Ala Leu Val Glu Asn Leu Cys Met Lys Ala Val Asn Gln Ser
 65 70 75 80
 Ile Gly Lys Pro Gly Cys Leu Gln Leu Gly Gly Gln Thr Gly Trp Arg
 85 90 95
 Arg Gly Glu Glu Glu Arg Gly Leu Pro Ala Leu Ser Pro Thr
 100 105 110

<210> 3405

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3405

Met Thr Arg Gly Thr Gln Gly Leu Pro Met Thr Met Gly Pro Arg Gly

1 5 10 15

Arg His Leu Ala Gln Gly Pro Val Leu Glu Thr Asp Asp Pro Arg Arg

20 25 30

Arg Arg Gln Gly Arg Arg Glu Ala Gly Arg Ala Gly Met Val Ser Gln

35 40 45

Ala Glu Gly Arg Thr Arg Thr Arg Met Glu Leu Gly Asn Asp Pro Gly

50 55 60

Val Phe Gly Gly Cys Arg Trp Val Arg Met Ala Val Gln Gly Gly Lys

65 70 75 80

Gly Cys Val Ala Gly Glu Gln Pro Gly Glu Ala Gln Thr Leu Leu Lys

85 90 95

Arg Cys Leu Leu Cys Arg Pro Pro His Pro Leu Pro Ala Pro Ser Gly

100

105

110

Ala Pro Ala Pro Pro Cys Ser Ala

115

120

<210> 3406

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3406

Met Arg Glu Val Gly Glu Ala Arg Glu Ala His Gly Ala Pro Ala Gln

1

5

10

15

Ala Pro His Thr Pro Ser Val Val Thr Val Ala His Glu Val Asn Ser

20

25

30

Pro Pro Pro Leu Gly Glu Lys Glu Ala Ala Trp Ala Ala Thr Cys Ser

35

40

45

Pro Ala Leu Pro Pro Pro Thr Ala Leu Met Asp Pro Ser Leu Pro Gly

50

55

60

Gly His Cys Phe Val Gly Phe Ser Pro Phe Val Gly Lys Gly Arg Cys

65

70

75

80

Pro Ala Gly Leu Gly Leu Val Arg Glu Glu Ser Arg Ala Leu Glu Arg

85

90

95

Gly Ala Gln His

100

<210> 3407

<211> 258

<212> PRT

<213> Homo sapiens

<400> 3407

Met Ala Ser Leu Leu Phe Leu Val Val Asn Leu Thr Cys Ala Met Leu
 1 5 10 15
 Val His Gly Asp Val Pro Glu Asn Gln Leu Lys Trp Thr Val Phe Val
 20 25 30
 Arg Ala Leu Ile Asn Asp Ser Leu Phe Ile Leu Cys Ala Ile Ser Leu
 35 40 45
 Val Cys Tyr Ile Cys Lys Ile Thr Lys Met Ser Ser Ala Asn Val Tyr
 50 55 60
 Leu Glu Ser Lys Gly Met Ser Leu Cys Gln Thr Val Val Val Gly Ser
 65 70 75 80
 Val Val Ile Leu Leu Tyr Ser Ser Arg Ala Cys Tyr Asn Leu Val Val
 85 90 95
 Val Thr Ile Ser Gln Asp Thr Leu Glu Ser Pro Phe Asn Tyr Gly Trp
 100 105 110
 Asp Asn Leu Ser Asp Lys Ala His Val Glu Asp Ile Ser Gly Glu Glu
 115 120 125
 Tyr Ile Val Phe Gly Met Val Leu Phe Leu Trp Glu His Val Pro Ala
 130 135 140
 Trp Ser Val Val Leu Phe Phe Arg Ala Gln Arg Leu Asn Gln Asn Leu
 145 150 155 160
 Ala Pro Ala Gly Met Ile Asn Ser His Ser Tyr Ser Ser Arg Ala Tyr
 165 170 175
 Phe Phe Asp Asn Pro Arg Arg Tyr Asp Ser Asp Asp Asp Leu Pro Arg
 180 185 190
 Leu Gly Ser Ser Arg Glu Gly Ser Leu Pro Asn Ser Gln Ser Leu Gly

195	200	205
Trp Tyr Gly Thr Met Thr Gly Cys Gly Ser Ser Ser Tyr Thr Val Thr		
210	215	220
Pro His Leu Asn Gly Pro Met Thr Asp Thr Ala Pro Leu Leu Phe Thr		
225	230	235
Cys Ser Asn Leu Asp Leu Asn Asn His His Ser Leu Tyr Val Thr Pro		
245	250	255
Gln Asn		

<210> 3408

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3408

Met Ser Ala Thr Leu Arg Glu Arg Leu Arg Lys Thr Arg Phe Ser Phe			
1	5	10	15

Asn Ser Ser Tyr Asn Val Val Lys Arg Leu Lys Val Glu Ser Glu Glu			
20	25	30	

Asn Asp Gln Thr Phe Ser Glu Lys Pro Ala Ser Ser Thr Glu Glu Asn			
35	40	45	

Cys Leu Glu Phe Gln Glu Ser Phe Lys His Ile Asp Ser Glu Phe Glu			
50	55	60	

Glu Asn Thr Asn Leu Lys Asn Thr Leu Lys Asn Leu Asn Val Cys Glu			
65	70	75	80

Ser Gln Ser Leu Asp Ser Gly Ser Cys Ser Ala Leu Gln Asn Glu Phe			
85	90	95	

Val Ser Glu Lys Leu Pro Lys Gln Arg Leu Asn Ala Glu Lys Ala Lys
 100 105 110
 Leu Val Lys Gln Val Gln Glu Lys Glu Asp Leu Leu Arg Arg Leu Lys
 115 120 125
 Leu Val Lys Met Tyr Arg Ser Lys Asn Asp Leu Ser Gln Leu Gln Leu
 130 135 140
 Leu Ile Lys Lys Trp Arg Ser Cys Ser Gln Leu Leu Leu Tyr Glu Leu
 145 150 155 160
 Gln Ser Ala Val Ser Glu Glu Asn Lys Lys Leu Ser Leu Thr Gln Leu
 165 170 175
 Ile Asp His Tyr Gly Leu Asp Asp Arg Leu Leu His Tyr Asn Arg Ser
 180 185 190
 Glu Glu Glu Phe Ile Asp Val
 195

<210> 3409

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3409

Met Pro Lys Gly Gly Cys Pro Lys Ala Pro Gln Gln Glu Glu Leu Pro
 1 5 10 15
 Leu Ser Ser Asp Met Val Glu Lys Gln Thr Gly Lys Lys Asp Lys Asp
 20 25 30
 Lys Val Ser Leu Thr Lys Thr Pro Lys Leu Glu Arg Gly Asp Gly Gly
 35 40 45
 Lys Glu Val Arg Glu Arg Ala Ser Lys Arg Lys Leu Pro Phe Thr Ala

50	55	60	
Gly Ala Asn Gly Glu Gln Lys Asp Ser Asp Thr Gly Pro Pro Gly Ser			
65	70	75	80
Cys Leu Ser Trp Gly Ser His Glu Gly Ala Leu Val Arg Ser Ala Met			
85	90		95
Gly Arg Ser Cys Leu Pro Ser Ala Arg Gly Cys Phe Phe Gly Thr Arg			
100	105	110	
Gly Lys Ile Met Ile Phe Leu Phe Cys Phe Asp Leu			
115	120		

<210> 3410

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3410

Met Pro Phe Ala Glu Asp Lys Thr Tyr Lys Tyr Ile Cys Arg Asn Phe			
1	5	10	15
Ser Asn Phe Cys Asn Val Asp Val Val Glu Ile Leu Pro Tyr Leu Pro			
20	25	30	
Cys Leu Thr Ala Arg Asp Gln Asp Arg Leu Arg Ala Thr Cys Thr Leu			
35	40	45	
Ser Gly Asn Arg Asp Thr Leu Trp His Leu Phe Asn Thr Leu Gln Leu			
50	55	60	
Pro Thr Trp Ala Gly Glu Glu Thr Pro Gly Gly Gln Ser Ser Gly Arg			
65	70	75	80
Gly Leu Asp Phe Ser Ser Leu Thr Ser Gly Ala Val Trp Leu Trp Gln			
85	90	95	

Met Ser Asp Phe Trp Ser Cys Phe Ser Thr Trp Thr Val Ser Ile Trp
 100 105 110
 Leu Ile Leu His Trp Val Leu Leu Arg Leu Asn Leu Gln Val Phe Ala
 115 120 125
 Lys Cys Leu Ala Gln Ser Lys Trp Pro Leu Leu Leu Pro Ser Leu Ser
 130 135 140
 Cys Pro Thr Trp
 145

<210> 3411

<211> 527

<212> PRT

<213> Homo sapiens

<400> 3411

Met Leu Ala Lys Pro His Gln Arg Leu Thr Lys Tyr Pro Leu Leu Leu
 1 5 10 15
 Lys Ser Val Leu Arg Lys Thr Glu Glu Pro Arg Ala Lys Glu Ala Val
 20 25 30
 Val Ala Met Ile Gly Ser Val Glu Arg Phe Ile His His Val Asn Ala
 35 40 45
 Cys Met Arg Gln Arg Gln Glu Arg Gln Arg Leu Ala Ala Val Val Ser
 50 55 60
 Arg Ile Asp Ala Tyr Glu Val Val Glu Ser Ser Ser Asp Glu Val Asp
 65 70 75 80
 Lys Leu Leu Lys Glu Phe Leu His Leu Asp Leu Thr Ala Pro Ile Pro
 85 90 95
 Gly Ala Ser Pro Glu Glu Thr Arg Gln Leu Leu Leu Glu Gly Ser Leu

100	105	110
Arg Met Lys Glu Gly Lys Asp Ser Lys Met Asp Val Tyr Cys Phe Leu		
115	120	125
Phe Thr Asp Leu Leu Leu Val Thr Lys Ala Val Lys Lys Ala Glu Arg		
130	135	140
Thr Arg Val Ile Arg Pro Pro Leu Leu Val Asp Lys Ile Val Cys Arg		
145	150	155
Glu Leu Arg Asp Pro Gly Ser Phe Leu Leu Ile Tyr Leu Asn Glu Phe		
165	170	175
His Ser Ala Val Gly Ala Tyr Thr Phe Gln Ala Ser Gly Gln Ala Leu		
180	185	190
Cys Arg Gly Trp Val Asp Thr Ile Tyr Asn Ala Gln Asn Gln Leu Gln		
195	200	205
Gln Leu Arg Ala Gln Glu Pro Pro Gly Ser Gln Gln Pro Leu Gln Ser		
210	215	220
Leu Glu Glu Glu Glu Asp Glu Gln Glu Glu Glu Glu Glu Glu Glu		
225	230	235
Glu Glu Glu Gly Glu Asp Ser Gly Thr Ser Ala Ala Ser Ser Pro		
245	250	255
Thr Ile Met Arg Lys Ser Ser Gly Ser Pro Asp Ser Gln His Cys Ala		
260	265	270
Ser Asp Gly Ser Thr Glu Thr Leu Ala Met Val Val Val Glu Pro Gly		
275	280	285
Asp Thr Leu Ser Ser Pro Glu Phe Asp Ser Gly Pro Phe Ser Ser Gln		
290	295	300
Ser Asp Glu Thr Ser Leu Ser Thr Thr Ala Ser Ser Ala Thr Pro Thr		
305	310	315
Ser Glu Leu Leu Pro Leu Gly Pro Val Asp Gly Arg Ser Cys Ser Met		
325	330	335

Asp Ser Ala Tyr Gly Thr Leu Ser Pro Thr Ser Leu Gln Asp Phe Val
 340 345 350
 Ala Pro Gly Pro Met Ala Glu Leu Val Pro Arg Ala Pro Glu Ser Pro
 355 360 365
 Arg Val Pro Ser Pro Pro Ser Pro Arg Leu Arg Arg Arg Thr Pro
 370 375 380
 Val Gln Leu Leu Ser Cys Pro Pro His Leu Leu Lys Ser Lys Ser Glu
 385 390 395 400
 Ala Ser Leu Leu Gln Leu Leu Ala Gly Ala Gly Thr His Gly Thr Pro
 405 410 415
 Ser Ala Pro Ser Arg Ser Leu Ser Glu Leu Cys Leu Ala Val Pro Ala
 420 425 430
 Pro Gly Ile Arg Thr Gln Gly Ser Pro Gln Glu Ala Gly Pro Ser Trp
 435 440 445
 Asp Cys Arg Gly Ala Pro Ser Pro Gly Ser Gly Pro Gly Leu Val Gly
 450 455 460
 Cys Leu Ala Gly Glu Pro Ala Gly Ser His Arg Lys Arg Cys Gly Asp
 465 470 475 480
 Leu Pro Ser Gly Ala Ser Pro Arg Val Gln Pro Glu Pro Pro Pro Gly
 485 490 495
 Val Ser Ala Gln His Arg Lys Leu Thr Leu Ala Gln Leu Tyr Arg Ile
 500 505 510
 Arg Thr Thr Leu Leu Leu Asn Ser Thr Leu Thr Ala Ser Glu Val
 515 520 525

<210> 3412

<211> 632

<212> PRT

<213> Homo sapiens

<400> 3412

Met Trp Leu Lys Pro Glu Glu Val Leu Leu Lys Asn Ala Leu Lys Leu
 1 5 10 15

Trp Leu Met Glu Arg Ser Asn Asp Tyr Phe Val Leu Gln Arg Arg Arg
 20 25 30

Gly Tyr Gly Glu Glu Gly Gly Leu Thr Gly Leu Leu Val Gly
 35 40 45

Thr Leu Asp Ser Val Leu Asp Ser Thr Ala Lys Val Ala Pro Phe Arg
 50 55 60

Ile Leu His Gln Thr Pro Asp Ser Gln Val Tyr Leu Ser Ile Ala Cys
 65 70 75 80

Gly Ala Asn Arg Glu Glu Ile Thr Lys His Trp Asp Trp Leu Glu Gln
 85 90 95

Asn Ile Met Lys Thr Leu Ser Val Phe Asp Ser Asn Glu Asp Ile Thr
 100 105 110

Asn Phe Val Gln Gly Lys Ile Arg Gly Leu Ile Ala Glu Glu Gly Lys
 115 120 125

His Cys Phe Ala Lys Glu Asp Asp Pro Glu Lys Phe Arg Glu Ala Leu
 130 135 140

Leu Lys Phe Glu Lys Cys Phe Gly Leu Pro Glu Lys Glu Lys Leu Val
 145 150 155 160

Thr Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Arg Val Pro Cys Gln Gly
 165 170 175

Trp Leu Tyr Leu Ser Thr Asn Phe Leu Ser Phe Tyr Ser Phe Leu Leu
 180 185 190

Gly Ser Glu Ile Lys Leu Ile Ile Ser Trp Asp Glu Val Ser Lys Leu
 195 200 205

Glu Lys Thr Ser Asn Val Ile Leu Thr Glu Ser Ile His Val Cys Ser
 210 215 220
 Gln Gly Glu Asn His Tyr Phe Ser Met Phe Leu His Ile Asn Gln Thr
 225 230 235 240
 Tyr Leu Leu Met Glu Gln Leu Ala Asn Tyr Ala Ile Arg Arg Leu Phe
 245 250 255
 Asp Lys Glu Thr Phe Asp Asn Asp Pro Val Leu Tyr Asn Pro Leu Gln
 260 265 270
 Ile Thr Lys Arg Gly Leu Glu Asn Arg Ala His Ser Glu Gln Phe Asn
 275 280 285
 Ala Phe Phe Arg Leu Pro Lys Gly Glu Ser Leu Lys Glu Val His Glu
 290 295 300
 Cys Phe Leu Trp Val Pro Phe Ser His Phe Asn Thr His Gly Lys Met
 305 310 315 320
 Cys Ile Ser Glu Asn Tyr Ile Cys Phe Ala Ser Gln Asp Gly Asn Gln
 325 330 335
 Cys Ser Val Ile Ile Pro Leu Arg Glu Val Leu Ala Ile Asp Lys Thr
 340 345 350
 Asn Asp Ser Ser Lys Ser Val Ile Ile Ser Ile Lys Gly Lys Thr Ala
 355 360 365
 Phe Arg Phe His Glu Val Lys Asp Phe Glu Gln Leu Val Ala Lys Leu
 370 375 380
 Arg Leu Arg Cys Gly Ala Ala Ser Thr Gln Tyr His Asp Ile Ser Thr
 385 390 395 400
 Glu Leu Ala Ile Ser Ser Glu Ser Thr Glu Pro Ser Asp Asn Phe Glu
 405 410 415
 Val Gln Ser Leu Thr Ser Gln Arg Glu Cys Ser Lys Thr Val Asn Thr
 420 425 430
 Glu Ala Leu Met Thr Val Phe His Pro Gln Asn Leu Glu Thr Leu Asn

435	440	445
Ser Lys Met Leu Lys Glu Lys Met Lys Glu Gln Ser Trp Lys Ile Leu		
450	455	460
Phe Ala Glu Cys Gly Arg Gly Val Ser Met Phe Arg Thr Lys Lys Thr		
465	470	475
Arg Asp Leu Val Val Arg Gly Ile Pro Glu Thr Leu Arg Gly Glu Leu		
485	490	495
Trp Met Leu Phe Ser Gly Val Val Asn Asp Met Ala Thr Asn Pro Asp		
500	505	510
Tyr Tyr Thr Glu Val Val Glu Gln Ser Leu Gly Thr Cys Asn Leu Ala		
515	520	525
Thr Glu Glu Ile Glu Arg Asp Leu Arg Arg Ser Leu Pro Glu His Pro		
530	535	540
Ala Phe Gln Ser Asp Thr Gly Ile Ser Ala Leu Arg Arg Val Leu Thr		
545	550	555
Ala Tyr Ala Tyr Arg Asn Pro Lys Ile Gly Tyr Cys Gln Ala Met Asn		
565	570	575
Ile Leu Thr Ser Val Leu Leu Tyr Ala Lys Glu Glu Ala Phe		
580	585	590
Trp Leu Leu Val Ala Val Cys Glu Arg Met Leu Pro Asp Tyr Phe Asn		
595	600	605
Arg Arg Ile Ile Gly Ser Asp Asp Phe Met Pro Leu Val Arg Ile Gln		
610	615	620
Gly Gln Cys Val Ile Gly Glu Lys		
625	630	

<210> 3413

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3413

Met Gly Leu Met Met Val Gly Val Leu Ile Gly Thr Phe Ile Ala His
 1 5 10 15

Val Val Cys Lys Arg Leu Leu Thr Ala Trp Val Ala Ala Arg Ile Gln
 20 25 30

Ser Ser Glu Lys Leu Ser Ala Val Ile Arg Val Val Glu Gly Gly Ser
 35 40 45

Gly Leu Lys Val Val Ala Leu Ala Arg Leu Thr Pro Ile Pro Phe Gly
 50 55 60

Leu Gln Asn Ala Val Phe Ser Ile Thr Asp Leu Ser Leu Pro Asn Tyr
 65 70 75 80

Leu Met Ala Ser Ser Val Gly Leu Leu Pro Thr Gln Leu Leu Asn Ser
 85 90 95

Tyr Leu Gly Thr Thr Leu Arg Thr Met Glu Asp Val Ile Ala Glu Gln
 100 105 110

Ser Val Ser Gly Tyr Phe Val Phe Cys Leu Gln Ile Ile Ser Ile
 115 120 125

Gly Leu Met Phe Tyr Val Val His Arg Ala Gln Val Glu Leu Asn Ala
 130 135 140

Ala Ile Val Ala Cys Glu Met Glu Leu Lys Ser Ser Leu Val Lys Gly
 145 150 155 160

Asn Gln Pro Asn Thr Ser Gly Ser Ser Phe Tyr Asn Lys Arg Thr Leu
 165 170 175

Thr Phe Ser Gly Gly Ile Asn Val Val
 180 185

<210> 3414

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3414

Met Gln Val Pro Pro Leu Tyr Ser Ala Leu Lys Lys Asp Gly Gln Arg

1 5 10 15

Leu Ser Thr Leu Met Lys Arg Gly Glu Val Val Glu Ala Lys Pro Ala

20 25 30

Arg Pro Val Thr Val Tyr Ser Ile Ser Leu Gln Lys Phe Gln Pro Pro

35 40 45

Phe Phe Thr Leu Asp Val Glu Cys Gly Gly Phe Tyr Ile Arg Ser

50 55 60

Leu Val Ser Asp Ile Gly Lys Glu Leu Ser Ser Cys Ala Asn Val Leu

65 70 75 80

Glu Leu Thr Arg Thr Lys Gln Gly Pro Phe Thr Leu Glu Glu His Ala

85 90 95

Leu Pro Glu Asp Lys Trp Thr Ile Asp Asp Ile Ala Gln Ser Leu Glu

100 105 110

His Cys Ser Ser Leu Phe Pro Ala Glu Leu Ala Leu Lys Lys Ser Lys

115 120 125

Pro Glu Ser Asn Glu Gln Val Leu Ser Cys Glu Tyr Ile Thr Leu Asn

130 135 140

Glu Pro Lys Arg Glu Asp Asp Val Ile Lys Thr Cys

145 150 155

<210> 3415

<211> 373

<212> PRT

<213> Homo sapiens

<400> 3415

Met Arg Val Cys Ser Tyr Glu Cys Leu Pro Trp Glu Glu Ala Met Arg

1 5 10 15

Thr Glu Leu Gln Leu Glu Ser Arg Ser Ser Gly Ser Glu Arg Glu Glu

20 25 30

Arg Gln Arg Leu Glu Thr Ile Leu Ser Leu Cys Ala Glu Tyr Thr Lys

35 40 45

Pro Asp Ser Arg Leu Ser Thr Gly Thr Thr Val Glu Asp Val Gln Lys

50 55 60

Ile Asn Lys Glu Leu Glu Lys Leu Gln Leu Ser Asp Glu Glu Ser Val

65 70 75 80

Phe Glu Glu Ala Leu Met Ser Pro Asp Thr Arg Tyr Arg Cys His Arg

85 90 95

Lys Asp Ser Leu Pro Asp Ala Asp Leu Ala Ser Cys Gly Ser Phe Ser

100 105 110

Gln Ser Ser Ala Ser Phe Phe Thr Pro Arg Ser Thr Arg Asn Asp Glu

115 120 125

Leu Leu Ser Asp Leu Thr Arg Thr Pro Pro Pro Pro Ser Ser Thr Phe

130 135 140

Pro Lys Ala Ser Ser Glu Ser Ser Tyr Leu Ser Ile Leu Pro Lys Thr

145 150 155 160

Pro Glu Gly Ile Ser Glu Glu Gln Arg Ser Gln Glu Leu Ala Ala Met

165 170 175

Glu Glu Thr Arg Ile Val Ile Leu Asn Asn Leu Glu Glu Leu Lys Gln

180	185	190
Lys Ile Lys Asp Ile Asn Asp Gln Met Asp Glu Ser Phe Arg Glu Leu		
195	200	205
Asp Met Glu Cys Ala Leu Leu Asp Gly Glu Gln Lys Ser Glu Thr Thr		
210	215	220
Glu Leu Met Lys Glu Lys Glu Ile Leu Asp His Leu Asn Arg Lys Ile		
225	230	235
Ala Glu Leu Glu Lys Asn Ile Val Gly Glu Lys Thr Lys Glu Lys Val		
245	250	255
Lys Leu Asp Ala Glu Arg Glu Lys Leu Glu Arg Leu Gln Glu Leu Tyr		
260	265	270
Ser Glu Gln Lys Thr Gln Leu Asp Asn Cys Pro Glu Ser Met Arg Glu		
275	280	285
Gln Leu Gln Gln Leu Lys Arg Asp Ala Asp Leu Leu Asp Val Glu		
290	295	300
Ser Lys His Phe Glu Asp Leu Glu Phe Gln Gln Leu Glu His Glu Ser		
305	310	315
Arg Leu Asp Glu Glu Lys Glu Asn Leu Thr Gln Gln Leu Leu Arg Glu		
325	330	335
Val Ala Glu Tyr Gln Arg Asn Ile Val Ser Arg Lys Glu Lys Ile Ser		
340	345	350
Ala Leu Lys Lys Gln Ala Asn His Ile Val Gln Gln Ala Gln Arg Glu		
355	360	365
Gln Asp His Phe Val		
370		

<210> 3416

<211> 847

<212> PRT

<213> Homo sapiens

<400> 3416

Met Asn Ala Ser Asn Asp Ile Thr Met Glu Asn Val Val His Glu Leu
 1 5 10 15
 Glu Leu Tyr Asn Thr Gly Tyr Tyr Leu Gly Met Phe Met Asn Ser Phe
 20 25 30
 Ala Val Phe Gln Glu Cys Gly Leu Trp Val Leu Thr Asp Ala Asn Leu
 35 40 45
 Thr Lys Asp Tyr Ile Asp Gly Val Tyr Asp Asn Ala Glu Tyr Ala Glu
 50 55 60
 Arg Phe Met Glu Glu Asn Glu Gly His Ile Val Asp Ile His Asp Phe
 65 70 75 80
 Ser Leu Gly Ser Ser Pro His Val Arg Lys His Phe Pro Glu Thr Trp
 85 90 95
 Ile Trp Leu Asp Thr Asn Met Gly Ser Arg Ile Tyr Gln Glu Phe Glu
 100 105 110
 Val Thr Val Pro Asp Ser Ile Thr Ser Trp Val Ala Thr Gly Phe Val
 115 120 125
 Ile Ser Glu Asp Leu Gly Leu Gly Leu Thr Thr Thr Pro Val Glu Leu
 130 135 140
 Gln Ala Phe Gln Pro Phe Phe Ile Phe Leu Asn Leu Pro Tyr Ser Val
 145 150 155 160
 Ile Arg Gly Glu Glu Phe Ala Leu Glu Ile Thr Ile Phe Asn Tyr Leu
 165 170 175
 Lys Asp Ala Thr Glu Val Lys Val Ile Ile Glu Lys Ser Asp Lys Phe
 180 185 190
 Asp Ile Leu Met Thr Ser Ser Glu Ile Asn Ala Thr Gly His Gln Gln

195	200	205
Thr Leu Leu Val Pro Ser Glu Asp Gly Ala Thr Val Leu Phe Pro Ile		
210	215	220
Arg Pro Thr His Leu Gly Glu Ile Pro Ile Thr Val Thr Ala Leu Ser		
225	230	235
Pro Thr Ala Ser Asp Ala Ile Thr Gln Met Ile Leu Val Lys Ala Glu		
245	250	255
Gly Ile Glu Lys Ser Tyr Ser Gln Ser Ile Leu Leu Asp Leu Thr Asp		
260	265	270
Asn Arg Leu Gln Ser Thr Leu Lys Thr Leu Ser Phe Ser Phe Pro Pro		
275	280	285
Asn Thr Val Thr Gly Ser Glu Arg Val Gln Ile Thr Ala Ile Gly Asp		
290	295	300
Val Leu Gly Pro Ser Ile Asn Gly Leu Ala Ser Leu Ile Arg Met Pro		
305	310	315
Tyr Gly Cys Gly Glu Gln Asn Met Ile Asn Phe Ala Pro Asn Ile Tyr		
325	330	335
Ile Leu Asp Tyr Leu Thr Lys Lys Gln Leu Thr Asp Asn Leu Lys		
340	345	350
Glu Lys Ala Leu Ser Phe Met Arg Gln Gly Tyr Gln Arg Glu Leu Leu		
355	360	365
Tyr Gln Arg Glu Asp Gly Ser Phe Ser Ala Phe Gly Asn Tyr Asp Pro		
370	375	380
Ser Gly Ser Thr Trp Leu Ser Ala Phe Val Leu Arg Cys Phe Leu Glu		
385	390	395
Ala Asp Pro Tyr Ile Asp Ile Asp Gln Asn Val Leu His Arg Thr Tyr		
405	410	415
Thr Trp Leu Lys Gly His Gln Lys Ser Asn Gly Glu Phe Trp Asp Pro		
420	425	430

Gly Arg Val Ile His Ser Glu Leu Gln Gly Gly Asn Lys Ser Pro Val
 435 440 445
 Thr Leu Thr Ala Tyr Ile Val Thr Ser Leu Leu Gly Tyr Arg Lys Tyr
 450 455 460
 Gln Pro Asn Ile Asp Val Gln Glu Ser Ile His Phe Leu Glu Ser Glu
 465 470 475 480
 Phe Ser Arg Gly Ile Ser Asp Asn Tyr Thr Leu Ala Leu Ile Thr Tyr
 485 490 495
 Ala Leu Ser Ser Val Gly Ser Pro Lys Ala Lys Glu Ala Leu Asn Met
 500 505 510
 Leu Thr Trp Arg Ala Glu Gln Glu Gly Gly Met Gln Phe Trp Val Ser
 515 520 525
 Ser Glu Ser Lys Leu Ser Asp Ser Trp Gln Pro Arg Ser Leu Asp Ile
 530 535 540
 Glu Val Ala Ala Tyr Ala Leu Leu Ser His Phe Leu Gln Phe Gln Thr
 545 550 555 560
 Ser Glu Gly Ile Pro Ile Met Arg Trp Leu Ser Arg Gln Arg Asn Ser
 565 570 575
 Leu Gly Gly Phe Ala Ser Thr Gln Asp Thr Thr Val Ala Leu Lys Ala
 580 585 590
 Leu Ser Glu Phe Ala Ala Leu Met Asn Thr Glu Arg Thr Asn Ile Gln
 595 600 605
 Val Thr Val Thr Gly Pro Ser Ser Pro Val Lys Phe Leu Ile
 610 615 620
 Asp Thr His Asn Arg Leu Leu Leu Gln Thr Ala Glu Leu Ala Val Val
 625 630 635 640
 Gln Pro Thr Ala Val Asn Ile Ser Ala Asn Gly Phe Gly Phe Ala Ile
 645 650 655
 Cys Gln Leu Asn Val Val Tyr Asn Val Lys Ala Ser Gly Ser Ser Arg

660	665	670
Arg Arg Arg Ser Ile Gln Asn Gln Glu Ala Phe Asp Leu Asp Val Ala		
675	680	685
Val Lys Glu Asn Lys Asp Asp Leu Asn His Val Asp Leu Asn Val Cys		
690	695	700
Thr Ser Phe Ser Gly Pro Gly Arg Ser Gly Met Ala Leu Met Glu Val		
705	710	715
Asn Leu Leu Ser Gly Phe Met Val Pro Ser Glu Ala Ile Ser Leu Ser		
725	730	735
Glu Thr Val Lys Lys Val Glu Tyr Asp His Gly Lys Leu Asn Leu Tyr		
740	745	750
Leu Asp Ser Val Asn Glu Thr Gln Phe Cys Val Asn Ile Pro Ala Val		
755	760	765
Arg Asn Phe Lys Val Ser Asn Thr Gln Asp Ala Ser Val Ser Ile Val		
770	775	780
Asp Tyr Tyr Glu Pro Arg Arg Gln Ala Val Arg Ser Tyr Asn Ser Glu		
785	790	795
Val Lys Leu Ser Ser Cys Asp Leu Cys Ser Asp Val Gln Gly Cys Arg		
805	810	815
Pro Cys Glu Asn Gly Ala Ser Gly Ser His His Ser Ser Val Ile		
820	825	830
Phe Ile Phe Cys Phe Lys Leu Leu Tyr Phe Met Glu Leu Trp Leu		
835	840	845

<210> 3417

<211> 653

<212> PRT

<213> Homo sapiens

<400> 3417

Met Val Glu Leu Val Asn Ile Glu Pro Val Cys Val Arg Gly Gly Leu
 1 5 10 15
 Tyr Glu Val Asp Val Thr Gln Gly Glu Cys Tyr Pro Val Tyr Trp Asn
 20 25 30
 Gln Ala Asp Lys Ile Pro Val Met Arg Gly Gln Trp Phe Ile Asp Gly
 35 40 45
 Thr Trp Gln Pro Leu Glu Glu Glu Ser Asn Leu Ile Glu Gln Glu
 50 55 60
 His Leu Asn Cys Phe Arg Gly Gln Gln Met Gln Glu Asn Phe Asp Ile
 65 70 75 80
 Glu Val Ser Lys Ser Ile Asp Gly Lys Asp Ala Val His Ser Phe Lys
 85 90 95
 Leu Ser Arg Asn His Val Asp Trp His Ser Val Asp Glu Val Tyr Leu
 100 105 110
 Tyr Ser Asp Ala Thr Thr Ser Lys Ile Ala Arg Thr Val Thr Gln Lys
 115 120 125
 Leu Gly Phe Ser Lys Ala Ser Ser Ser Gly Thr Arg Leu His Arg Gly
 130 135 140
 Tyr Val Glu Glu Ala Thr Leu Glu Asp Lys Pro Ser Gln Thr Thr His
 145 150 155 160
 Ile Val Phe Val Val His Gly Ile Gly Gln Lys Met Asp Gln Gly Arg
 165 170 175
 Ile Ile Lys Asn Thr Ala Met Met Arg Glu Ala Ala Arg Lys Ile Glu
 180 185 190
 Glu Arg His Phe Ser Asn His Ala Thr His Val Glu Phe Leu Pro Val
 195 200 205
 Glu Trp Arg Ser Lys Leu Thr Leu Asp Gly Asp Thr Val Asp Ser Ile

210	215	220
Thr Pro Asp Lys Val Arg Gly Leu Arg Asp Met Leu Asn Ser Ser Ala		
225	230	235
Met Asp Ile Met Tyr Tyr Thr Ser Pro Leu Tyr Arg Asp Glu Leu Val		240
245	250	255
Lys Gly Leu Gln Gln Glu Leu Asn Arg Leu Tyr Ser Leu Phe Cys Ser		
260	265	270
Arg Asn Pro Asp Phe Glu Glu Lys Gly Gly Lys Val Ser Ile Val Ser		
275	280	285
His Ser Leu Gly Cys Val Ile Thr Tyr Asp Ile Met Thr Gly Trp Asn		
290	295	300
Pro Val Arg Leu Tyr Glu Gln Leu Leu Gln Lys Glu Glu Glu Leu Pro		
305	310	315
Asp Glu Arg Trp Met Ser Tyr Glu Glu Arg His Leu Leu Asp Glu Leu		320
325	330	335
Tyr Ile Thr Lys Arg Arg Leu Lys Glu Ile Glu Glu Arg Leu His Gly		
340	345	350
Leu Lys Ala Ser Ser Met Thr Gln Thr Pro Ala Leu Lys Phe Lys Val		
355	360	365
Glu Asn Phe Phe Cys Met Gly Ser Pro Leu Ala Val Phe Leu Ala Leu		
370	375	380
Arg Gly Ile Arg Pro Gly Asn Thr Gly Ser Gln Asp His Ile Leu Pro		
385	390	395
Arg Glu Ile Cys Asn Arg Leu Leu Asn Ile Phe His Pro Thr Asp Pro		400
405	410	415
Val Ala Tyr Arg Leu Glu Pro Leu Ile Leu Lys His Tyr Ser Asn Ile		
420	425	430
Ser Pro Val Gln Ile His Trp Tyr Asn Thr Ser Asn Pro Leu Pro Tyr		
435	440	445

Glu His Met Lys Pro Ser Phe Leu Asn Pro Ala Lys Glu Pro Thr Ser
 450 455 460
 Val Ser Glu Asn Glu Gly Ile Ser Thr Ile Pro Ser Pro Val Thr Ser
 465 470 475 480
 Pro Val Leu Ser Arg Arg His Tyr Gly Glu Ser Ile Thr Asn Ile Gly
 485 490 495
 Lys Ala Ser Ile Leu Gly Ala Ala Ser Ile Gly Lys Gly Leu Gly Gly
 500 505 510
 Met Leu Phe Ser Arg Phe Gly Arg Ser Ser Thr Thr Gln Ser Ser Glu
 515 520 525
 Thr Ser Lys Asp Ser Met Glu Asp Glu Lys Lys Pro Val Ala Ser Pro
 530 535 540
 Ser Ala Thr Thr Val Gly Thr Gln Thr Leu Pro His Ser Ser Ser Gly
 545 550 555 560
 Phe Leu Asp Ser Ala Tyr Phe Arg Leu Gln Glu Ser Phe Phe Asn Leu
 565 570 575
 Pro Gln Leu Leu Phe Pro Glu Asn Val Met Gln Asn Lys Asp Asn Ala
 580 585 590
 Leu Val Glu Leu Asp His Arg Ile Asp Phe Glu Leu Arg Glu Gly Leu
 595 600 605
 Val Glu Ser Arg Tyr Trp Ser Ala Val Thr Ser His Thr Ala Tyr Trp
 610 615 620
 Ser Ser Leu Asp Val Ala Leu Phe Leu Leu Thr Phe Met Tyr Lys His
 625 630 635 640
 Glu His Asp Asp Asp Ala Lys Pro Asn Leu Asp Pro Ile
 645 650

<211> 531

<212> PRT

<213> Homo sapiens

<400> 3418

Met Lys Gly Ala Arg Leu Phe Val Leu Leu Ser Ser Leu Trp Ser Gly

1 5 10 15

Gly Ile Gly Leu Asn Asn Ser Lys His Ser Trp Thr Ile Pro Glu Asp

20 25 30

Gly Asn Ser Gln Lys Thr Met Pro Ser Ala Ser Val Pro Pro Asn Lys

35 40 45

Ile Gln Ser Leu Gln Ile Leu Pro Thr Thr Arg Val Met Ser Ala Glu

50 55 60

Ile Ala Thr Thr Pro Glu Lys Ala Glu Gly Val Val Lys Leu Gln Asn

65 70 75 80

Leu Thr Leu Pro Thr Asn Ala Ser Ile Lys Phe Asn Pro Gly Ala Glu

85 90 95

Ser Val Val Leu Ser Asn Ser Thr Leu Lys Phe Leu Gln Ser Phe Ala

100 105 110

Arg Lys Ser Asn Glu Gln Ala Thr Ser Leu Asn Thr Val Gly Gly Thr

115 120 125

Gly Gly Ile Gly Gly Val Gly Gly Thr Gly Gly Val Gly Asn Arg Ala

130 135 140

Pro Arg Glu Thr Tyr Leu Ser Arg Gly Asp Ser Ser Ser Gln Arg

145 150 155 160

Thr Asp Tyr Gln Lys Ser Asn Phe Glu Thr Thr Arg Gly Lys Asn Trp

165 170 175

Cys Ala Tyr Val His Thr Lys Leu Ser Pro Thr Val Ile Leu Asp Asn

180 185 190

Gln Val Thr Tyr Val Pro Gly Gly Lys Gly Pro Cys Gly Trp Thr Gly
 195 200 205
 Gly Ser Cys Pro Gln Arg Ser Gln Lys Ile Ser Asn Pro Val Tyr Arg
 210 215 220
 Met Gln His Lys Ile Val Thr Ser Leu Asp Trp Arg Cys Cys Pro Gly
 225 230 235 240
 Tyr Ser Gly Pro Lys Cys Gln Leu Arg Ala Gln Glu Gln Gln Ser Leu
 245 250 255
 Ile His Thr Asn Gln Ala Glu Ser His Thr Ala Val Gly Arg Gly Val
 260 265 270
 Ala Glu Gln Gln Gln Gln Gly Cys Gly Asp Pro Glu Val Met Gln
 275 280 285
 Lys Met Thr Asp Gln Val Asn Tyr Gln Ala Met Lys Leu Thr Leu Leu
 290 295 300
 Gln Lys Lys Ile Asp Asn Ile Ser Leu Thr Val Asn Asp Val Arg Asn
 305 310 315 320
 Thr Tyr Ser Ser Leu Glu Gly Lys Val Ser Glu Asp Lys Ser Arg Glu
 325 330 335
 Phe Gln Ser Leu Leu Lys Glu Glu Tyr Ser Ser Cys Ser Arg His Pro
 340 345 350
 Cys Gln Asn Gly Gly Thr Cys Ile Asn Gly Arg Thr Ser Phe Thr Cys
 355 360 365
 Ala Cys Arg His Pro Phe Thr Gly Asp Asn Cys Thr Ile Lys Leu Val
 370 375 380
 Glu Glu Asn Ala Leu Ala Pro Asp Phe Ser Lys Gly Ser Tyr Arg Tyr
 385 390 395 400
 Ala Pro Met Val Ala Phe Phe Ala Ser His Thr Tyr Gly Met Thr Ile
 405 410 415
 Pro Gly Pro Ile Leu Phe Asn Asn Leu Asp Val Asn Tyr Gly Ala Ser

420	425	430
Tyr Thr Pro Arg Thr Gly Lys Phe Arg Ile Pro Tyr Leu Gly Val Tyr		
435	440	445
Val Phe Lys Tyr Thr Ile Glu Ser Phe Ser Ala His Ile Ser Gly Phe		
450	455	460
Leu Val Val Asp Gly Ile Asp Lys Leu Ala Phe Glu Ser Glu Asn Ile		
465	470	475
Asn Ser Glu Ile His Cys Asp Arg Val Leu Thr Gly Asp Ala Leu Leu		
485	490	495
Glu Leu Asn Tyr Gly Gln Glu Val Trp Leu Arg Leu Ala Lys Gly Thr		
500	505	510
Ile Pro Ala Lys Phe Pro Pro Val Thr Thr Phe Ser Gly Tyr Leu Leu		
515	520	525
Tyr Arg Thr		
530		

<210> 3419

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3419

Met Gln Gln Gly Ser Ala Ser Thr Thr Pro Asp Gln Glu Leu Gln Asn			
1	5	10	15
Cys Lys Ile Leu Asp Thr Ile Gly Arg Gly Thr Phe Ser Glu Val Gln			
20	25	30	
Asp His Met Leu Ile Gly Thr Gln Met Ala Ile Lys Ile Ile Pro Lys			
35	40	45	

Ala Gly Ser Leu Gly Ile Thr Leu Gln Arg Val Ile Ser Ile Leu Lys
 50 55 60
 Leu Leu Cys His Phe Asn Ile Val Arg Leu Tyr Gln Val Ile Asp Thr
 65 70 75 80
 Pro Asn Thr Ser Tyr Leu Phe Ser Asn Gly Val Cys Lys Arg Arg Thr
 85 90 95
 Pro Thr Gln Pro Ile His His His Gly Leu Met Arg Glu Glu Lys Ala
 100 105 110

<210> 3420

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3420

Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly
 1 5 10 15
 Asn Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser
 20 25 30
 Gly Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro
 35 40 45
 Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu
 50 55 60
 Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn
 65 70 75 80
 Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln
 85 90 95
 Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr

100	105	110
Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe		
115	120	125
Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Ile Ser Gly		
130	135	140
Arg Ser Gly Ser Leu Ile Asp Ala Ile Gly Leu His Trp Asp Val Tyr		
145	150	155
Pro Thr Ser Cys Ser Arg Cys		
165		

<210> 3421

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3421

Met Ile Gly Cys Leu His Ala Arg Val Ser Gly Pro Leu Trp Asp Ala			
1	5	10	15
Gly Leu Cys Pro Ala Ser Ser Arg Ser Ala His Thr Cys Leu Ser Leu			
20	25	30	
Ser Val Ser Asp Ala Pro Val Ser Pro Ala Thr Ala Pro His Cys Leu			
35	40	45	
Leu Leu Ser Thr Ala Pro Ala Pro Pro Cys Pro Cys His Gly Val Leu			
50	55	60	
Asn Ser His Pro Phe Ser Pro Pro Phe Pro Gln Arg Pro Asp Gln Glu			
65	70	75	80
Leu Thr Gly Ser Trp Gly His Gly Pro Arg Ser Thr Leu Val Arg Ala			
85	90	95	

Lys Ala Met Ala Pro Pro Pro Pro Leu Ala Ala Ser Thr Pro Leu
 100 105 110
 Leu His Gly Glu Phe Gly Ser Tyr Pro Ala Arg Gly Pro Arg Phe Ala
 115 120 125
 Leu Thr Leu Thr Ser Gln Ala Leu His Ile Gln Arg Leu Arg Pro Lys
 130 135 140
 Pro Glu Ala Arg Pro Arg Gly Gly Leu Val Pro Leu Ala Glu Val Ser
 145 150 155 160
 Gly Cys Cys Thr Leu Arg Ser Arg Ser Pro Ser Asp Ser Ala Ala Tyr
 165 170 175
 Phe Cys Ile Tyr Thr Tyr Pro Arg Gly Arg Arg Gly Ala Arg Arg Arg
 180 185 190
 Ala Thr Arg Thr Phe Arg Ala Asp Gly Ala Ala Thr Tyr Glu Glu Asn
 195 200 205
 Arg Ala Glu Ala Gln Arg Trp Ala Thr Ala Leu Thr Cys Leu Leu Arg
 210 215 220
 Gly Leu Pro Leu Pro Gly Asp Gly Gly Glu Val Leu Gly Ser Cys Ser
 225 230 235 240
 Ile Leu Glu Pro Pro Trp Cys Leu Cys Arg Ile Ser Ser Ile Gly Ser
 245 250 255
 Cys Val Phe Ile Phe Leu Cys Val Trp Val Met Tyr Leu Ser Gly Ser
 260 265 270
 Val Arg Ser Asp Thr Gln Gly Trp Ala Thr Glu Gly Thr Lys Arg Gln
 275 280 285
 Glu Asp Arg Met Trp Trp Leu Met Ser Val Ile Leu Ala Ile Trp Glu
 290 295 300
 Ala Glu Ala Gly Gly Ser Pro Glu Ile Arg Ser Ser Arg Pro Ala Trp
 305 310 315 320
 Leu Thr Trp

<210> 3422

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3422

Met Ser Val Val Pro Glu Lys Ser Gly Cys Leu Cys Leu Ala Ser Leu

1 5 10 15

His Thr Trp Ala Leu Thr Ser Arg Leu Leu Gly Ser Ser Ser Ser Val

20 25 30

Ser Arg Ala Ala Val Leu Leu Leu Val Phe Pro His Phe Pro Pro

35 40 45

Gly Lys Glu Arg Leu Pro Asn Ala Gly Met Glu Tyr Lys Gln Asn Val

50 55 60

Met Gly Ser Ala Val Thr Pro Pro Pro Glu Ala Glu Ala Val Leu Leu

65 70 75 80

Glu Asp Arg Arg Arg His His Arg Val Phe Pro Leu Pro Leu Pro Leu

85 90 95

Leu Arg Asn Val Ser Ile Pro Ile Gly

100 105

<210> 3423

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3423

Met Val Lys Gly Gly Ser Ser Ile Ile Ser Pro Asp Thr Asn Leu Leu
1 5 10 15
Asn Ile Lys Gly Ser His Ser Lys Ser Lys Asn Ser His Phe Phe Phe
20 25 30
Ser Asn Thr Val Lys Ile Thr Ala Phe Ser Lys Lys Asn Glu Asn Ile
35 40 45
Phe Asn Cys Asp Leu Ile Asp Ser Val Asp Gln Ile Lys Asn Met Pro
50 55 60
Cys Leu Asp Leu Arg Glu Phe Gly Lys Asp Val Lys Pro Trp His Val
65 70 75 80
Glu Thr Thr Glu Ala Ala Arg Asn Asn Glu Asn Thr Gly Phe Asp Ala
85 90 95
Leu Ser His Glu Cys Thr Ala Lys Pro Leu Phe Pro Arg Val Glu Val
100 105 110
Gln Ser Glu Gln Leu Thr Val Glu Glu His Ile Lys Arg Asn Arg Cys
115 120 125
Tyr Ser Asp Thr Glu
130

<210> 3424

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3424

Met Ser Ile Arg Ser Asp Lys Ile Lys Asp Ile Asn Leu Met Phe Pro

1	5	10	15
Trp Pro Ala Leu Arg Cys Ala Gly Thr Asn Arg Leu Tyr Leu Leu Tyr			
20	25	30	
Phe Phe Phe Pro Phe Phe Leu Lys Arg Ser Leu Ala Gln Ser Pro Arg			
35	40	45	
Leu Glu Gly Ser Gly Ala Ile Ser Ala His Cys Arg Leu Arg Leu Pro			
50	55	60	
Gly Ser Arg Arg Ser Pro Ala Ser Ala Ser Arg Ile Ala Gly Thr Thr			
65	70	75	80
Gly Ala Arg His Tyr Ala Arg Leu Ile Phe Cys Val Phe Leu Val Glu			
85	90	95	
Ala Gly Phe His His Val Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro			
100	105	110	
Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys			
115	120	125	
Val Arg Pro Leu Tyr Phe Phe Glu Leu Gln Thr			
130	135		

<210> 3425
<211> 452
<212> PRT
<213> Homo sapiens

1	5	10	15
Met Pro Trp Gly Lys Asn Ser Ser Pro His Trp Gly His His Leu Gly			
20	25	30	
Cys Leu Pro Ser Ala Pro Ala Cys Arg Ile Trp Arg Pro His Ser Arg			

Pro Ala Trp Glu Pro Pro Arg Pro Ser Pro Leu Leu Cys Gln Asp Met
 35 40 45
 Ala Leu Gln Asn Ala Leu Tyr Thr Gly Asp Leu Ala Arg Leu Gln Glu
 50 55 60
 Leu Phe Pro Pro His Ser Thr Ala Asp Leu Leu Leu Glu Ser Arg Ala
 65 70 75 80
 Ala Glu Pro Arg Trp Ser Ser His Gln Arg Gly Leu Trp Ser Leu Thr
 85 90 95
 Tyr Glu Glu Glu Leu Thr Thr Pro Leu His Val Ala Ala Ser Arg Gly
 100 105 110
 His Thr Glu Val Leu Arg Leu Leu Arg Arg Arg Ala Arg Pro Asp
 115 120 125
 Ser Ala Pro Gly Gly Arg Thr Ala Leu His Glu Ala Cys Ala Ala Gly
 130 135 140
 His Thr Ala Cys Val His Val Leu Leu Val Ala Gly Ala Asp Pro Asn
 145 150 155 160
 Ile Ala Asp Gln Asp Gly Lys Arg Pro Leu His Leu Cys Arg Gly Pro
 165 170 175
 Gly Thr Leu Glu Cys Ala Glu Leu Leu Leu Arg Phe Gly Ala Arg Val
 180 185 190
 Asp Gly Arg Ser Glu Glu Glu Glu Thr Pro Leu His Val Ala Ala
 195 200 205
 Arg Leu Gly His Val Glu Leu Ala Asp Leu Leu Leu Arg Arg Gly Ala
 210 215 220
 Cys Pro Asp Ala Arg Asn Ala Glu Gly Trp Thr Pro Leu Leu Ala Ala
 225 230 235 240
 Cys Asp Val Arg Cys Gln Ser Ile Thr Asp Ala Glu Ala Thr Thr Ala
 245 250 255
 Arg Cys Leu Gln Leu Cys Ser Leu Leu Leu Ser Ala Gly Ala Asp Ala

260	265	270
Asp Ala Ala Asp Gln Asp Lys Gln Arg Pro Leu His Leu Ala Cys Arg		
275	280	285
Arg Gly His Ala Ala Val Val Glu Leu Leu Leu Ser Cys Gly Val Ser		
290	295	300
Ala Asn Thr Met Asp Tyr Gly Gly His Thr Pro Leu His Cys Ala Leu		
305	310	315
Gln Gly Pro Ala Ala Ala Leu Ala Gln Ser Pro Glu His Val Val Arg		
325	330	335
Ala Leu Leu Asn His Gly Ala Val Arg Val Trp Pro Gly Ala Leu Pro		
340	345	350
Lys Val Leu Glu Arg Trp Ser Thr Cys Pro Arg Thr Ile Glu Val Leu		
355	360	365
Met Asn Thr Tyr Ser Val Val Gln Leu Pro Glu Glu Ala Val Gly Leu		
370	375	380
Val Thr Pro Glu Thr Leu Gln Lys His Gln Arg Phe Tyr Ser Ser Leu		
385	390	395
Phe Ala Leu Val Arg Arg Pro Arg Ser Leu Gln His Leu Ser Arg Cys		
405	410	415
Ala Pro Arg Ser His Leu Glu Gly Ser Leu Pro Gln Ala Leu Pro Arg		
420	425	430
Leu Pro Leu Pro Pro Arg Leu Leu Arg Tyr Leu Gln Leu Asp Phe Glu		
435	440	445
Gly Val Leu Tyr		
450		

<210> 3426

<211> 398

<212> PRT

<213> Homo sapiens

<400> 3426

Met Val Thr Leu Ile Thr Glu Lys Leu Gln Ser Gln Ser Leu Asp Asp
1 5 10 15
Leu Thr Cys Lys Ala Glu Ala Gly Pro Leu Gln Tyr Ser Ala Glu Thr
20 25 30
Leu Asn Lys Ser Gly Arg Leu Phe Pro Leu Glu Leu Asn Asp Gln Ser
35 40 45
Pro Trp Lys Val Phe Ser Gly Gly Pro Pro Val Arg Ser Gln Ala Ala
50 55 60
Thr Gly Pro Asp Phe Ser Phe Leu Pro Gly Leu Ser Ala Ala Ala His
65 70 75 80
Thr Met Gly Leu Gln Trp Gln Pro Gln Ser Pro Arg Pro Gly Val Gly
85 90 95
Leu Gly Ala Ala Ser Thr Val Asp Pro Ser Glu Ser Thr Gly Ser Ser
100 105 110
Thr Ala Pro Pro Thr Lys Arg His Cys Arg Ser Leu Ser Glu Pro Glu
115 120 125
Glu Leu Val Arg Cys Arg Ser Pro Trp Arg Pro Gly Ser Ser Lys Val
130 135 140
Trp Thr Pro Val Ser Lys Arg Arg Cys Asp Ser Gly Gly Ser Ala Thr
145 150 155 160
Arg Gln Gly Ser Pro Gly Ala Val Leu Pro Arg Ser Ala Val Trp Ser
165 170 175
Thr Gly Pro Thr Ser Pro Ala Thr Pro Arg Pro Ser Ser Ala Ser Gly
180 185 190
Gly Phe Val Asp Ser Ser Glu Gly Ser Ala Gly Ser Gly Pro Leu Trp

195	200	205
Cys Ser Ala Glu Ser Cys Leu Pro Ser Thr Arg Arg Arg Pro Ser Leu		
210	215	220
Ser Gln Glu Arg Leu Ala Gly Ala Gly Thr Pro Leu Pro Trp Ala Ser		
225	230	235
Ser Ser Pro Thr Ser Thr Pro Ala Leu Gly Gly Arg Arg Gly Leu Leu		
245	250	255
Arg Cys Arg Ser Gln Pro Cys Val Leu Ser Gly Lys Arg Ser Arg Arg		
260	265	270
Lys Arg Arg Arg Glu Glu Asp Ala Arg Trp Thr Arg Pro Ser Leu Asp		
275	280	285
Phe Leu Lys Met Thr Gln Thr Leu Lys Asn Ser Lys Ser Leu Cys Ser		
290	295	300
Leu Asn Tyr Glu Asp Asp Asp Glu Asp Asp Thr Pro Val Lys Thr Val		
305	310	315
Leu Ser Ser Pro Cys Asp Ser Arg Gly Leu Pro Gly Ile Thr Met Pro		
325	330	335
Gly Cys Ser Gln Arg Gly Leu Arg Thr Ser Pro Val His Pro Asn Leu		
340	345	350
Trp Ala Ser Arg Glu Ser Val Thr Ser Asp Gly Ser Arg Arg Ser Ser		
355	360	365
Gly Asp Pro Arg Asp Gly Asp Ser Val Gly Glu Glu Gly Val Phe Pro		
370	375	380
Arg Ala Arg Trp Glu Leu Asp Leu Glu Gln Ile Glu Asn Asn		
385	390	395

<210> 3427

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3427

Met Pro Ala Pro Met Val Val Ser Gly Lys Ala His Ser Ser Ser Val

1 5 10 15

Thr Phe Pro Phe Ser Ile His Leu Arg Leu His Ala Leu Gln Leu Leu

20 25 30

Gly Leu Cys Ser Cys His Ile Glu Glu Gly Gly Trp Ala Arg His Gly

35 40 45

Ile Ile Leu Arg Ser Leu Leu His Gln Leu Leu Gly Thr Met Glu Tyr

50 55 60

Pro Arg Val Val Thr Ala Asp Gly Ala Thr Trp Gly Arg Ala Gln Val

65 70 75 80

Gly Gln Ala Thr Ala Gly Val Met Ala Cys Glu Pro Gln Ala Thr Ser

85 90 95

Gly Thr Phe Pro Thr Ala Ser Met Gln Gly Cys Arg Ala Met Val Pro

100 105 110

Phe Ser Thr Ala Leu Glu Leu

115

<210> 3428

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3428

Met Asp Gln Ser Arg Gly Arg Gly Thr Ala Leu Glu Pro Ile Gly Gly

1	5	10	15
Leu Arg Met Ala Ser Leu Ser Gly Lys Asp Phe His Pro Asp Ser Phe			
20	25	30	
Arg Pro Gln Pro Gln Pro Ser Arg Arg Trp Ala Gly Leu Glu Glu Arg			
35	40	45	
Ser Ser Glu Arg Thr Ile Asn Leu Ser Val Leu His Phe Tyr Pro Ser			
50	55	60	
Pro Gln Glu Ser Pro Ser Leu Pro Ser Ala Val Arg Pro Phe Pro Gly			
65	70	75	80
Ala Arg Gly Val Arg Ser Arg Ala Leu Met Gly Val Asn Cys Ser Leu			
85	90	95	
Asp Ser Val Lys Leu Ala Cys Trp Leu Gly Val Phe Pro Ile Trp Gly			
100	105	110	
Glu Ser Pro Leu Thr Asn Ser Pro Lys Ala Ile His Arg Ala Phe Tyr			
115	120	125	
Ser Pro Thr Ser Thr Gln Leu Leu Tyr Arg Gln Arg Gln Arg Gln Thr			
130	135	140	
His Thr His Ser			
145			

<210> 3429

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3429

Met Arg Pro Leu Gly Lys Gly Leu Leu Pro Ala Glu Glu Leu Ile Arg

1	5	10	15
---	---	----	----

Ser Asn Leu Gly Val Gly Arg Ser Leu Arg Asp Cys Leu Ser Gln Ser
 20 25 30
 Gly Lys Leu Ala Glu Glu Leu Gly Ser Lys Arg Leu Lys Pro Ala Lys
 35 40 45
 Phe Gly Thr Glu Gly Glu Arg Val Glu Gln Arg Thr Glu Arg Gln
 50 55 60
 Arg Thr Gly Ser Ser Lys Glu Pro Arg Met Gln Ile Ile Cys Arg Arg
 65 70 75 80
 Arg Trp Arg Glu Pro Pro Arg Leu Leu Trp Gly Cys Leu Met Pro
 85 90 95
 Arg Ala Gln Pro Leu Leu His Val Thr Ala Tyr Glu Asn Thr Gly His
 100 105 110
 Trp Glu Arg Leu Ala Ser Val Val Ser Ser Thr Gln Gln Pro Thr
 115 120 125
 Val Ile Ser His Ser Ser Ile Ser Ile Thr Phe Ser His Tyr Pro Pro
 130 135 140
 Ala Thr Leu Asp Ser Phe Leu Val Leu Glu Pro Ile Lys Leu Phe Pro
 145 150 155 160
 Val Ser Ser Leu Arg Ser Pro Leu Cys Leu Asn Cys Gly Ser Cys Arg
 165 170 175
 Glu Ser Ile Arg Ile Ser Gly Glu Leu Ile Gly Asn Ala His Ser Pro
 180 185 190
 Ala Pro Pro Arg Thr Pro Glu Leu Glu Thr Leu Gly Trp Asp Lys Gln
 195 200 205
 Ala Val Leu Ser Gly Ala Gln Val Ile Leu Val Cys Ala Glu Val
 210 215 220

<210> 3430

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3430

Met Val Thr Leu Met Gly Val Trp Leu Gly Pro Trp Gly Arg Gly Met

1 5 10 15

Ala Ala Pro Pro Thr Glu Gly Ala Ala Val Thr Pro Ala Ser Ser Pro

20 25 30

Gly Pro Gln Ala Ser Leu Ala Trp Arg Ser Ser Gly Ser Arg Pro Cys

35 40 45

Cys Pro Leu Thr Ala Ser Leu Thr Ser Pro Trp Arg Asn Gln Pro Leu

50 55 60

His Thr Ala Pro Ser Gly Gly Cys Cys Val Thr Gly Pro Ala Cys

65 70 75 80

Ser Ile Ala Trp Ala Gly Arg Ser Pro Pro Ser Arg Trp Ile Phe Gln

85 90 95

Arg Gly Leu Thr Ala Thr Ser Thr Leu Pro Gly Ser Cys Trp Lys Gly

100 105 110

Arg Ser Ser Ala Ser Trp Pro His Thr Gly Ala Val Cys Cys Pro Ala

115 120 125

Pro Ala Pro Cys

130

<210> 3431

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3431

Met Glu Gln Asp Asn Ser Pro Arg Lys Ile Gln Phe Thr Val Pro Leu
 1 5 10 15

Leu Glu Pro His Leu Asp Pro Glu Ala Ala Glu Gln Ile Arg Arg Arg
 20 25 30

Arg Pro Thr Pro Ala Thr Leu Val Leu Thr Ser Asp Gln Ser Ser Pro
 35 40 45

Glu Ile Asp Glu Asp Arg Ile Pro Asn Pro His Leu Lys Lys Leu Gln
 50 55 60

Asn Ala Ser Leu Lys Leu Thr Arg Glu Ala Val Arg Asn Pro Ala Gln
 65 70 75 80

Lys Asn Pro Gln Pro Ile Tyr His His Trp Ile Pro Arg Glu Pro Thr
 85 90 95

Arg Ser Glu Arg Arg Gly Gly Thr Gly Gly Gln Lys Ser Val Gly Gly
 100 105 110

Phe Pro Cys Ser Thr His Thr Leu Ala Pro Phe Tyr Val Phe Thr Arg
 115 120 125

Ser Ile Leu Leu Leu Lys Arg Gly Glu Arg Met Ser His Pro Leu Glu
 130 135 140

Pro Arg Asp Asp Pro Thr Lys Met Pro
 145 150

<210> 3432

<211> 387

<212> PRT

<213> Homo sapiens

<400> 3432

Met Ser Ser Pro Pro Ala Leu Arg Asp Ser Pro Val Cys Pro Arg Tyr
 1 5 10 15
 Ser Pro Thr Thr Pro Thr Phe Gln Leu Glu Ser Leu Ala Gly Thr Gln
 20 25 30
 Glu Leu Pro Thr Asn Ser Ala Val Ala Leu Ser Tyr Ser Pro Val Ser
 35 40 45
 Leu Met Ser Ser Pro Pro Ala Pro Trp Asp Ser Pro Val Cys Pro Ser
 50 55 60
 Ser Ser Pro Thr Thr Pro Arg Phe Gln Arg Glu Ser Ala Ser His Thr
 65 70 75 80
 Pro Glu Ser Pro Thr Asp Ser Gln Thr Ser Arg Arg Ser Ser Leu Val
 85 90 95
 Ser Leu Arg Ser Leu Pro Ser Ala His Arg Asp Ser Cys Val Ser Phe
 100 105 110
 Ser Tyr Ser Arg Asn Phe Ser Arg Phe Gln Leu Asp Ser Val Pro Gly
 115 120 125
 Thr His Asp Thr Pro Pro Asn Ser Arg Ile Ser Leu Thr Tyr Ser Pro
 130 135 140
 Val Ser Leu Met Phe Ser Pro Pro Ala Leu Arg Asp Ser Ser Val Ser
 145 150 155 160
 Leu Ser Tyr Ser Pro Ala Ile Ser Thr Ser His Leu Gly Ser Ala Ser
 165 170 175
 His Thr Gln Glu Ser Pro Thr Asn Ser Arg Thr Leu Leu Gln Pro Ser
 180 185 190
 Pro Ile Ser Phe Thr Ser Ser Pro Pro Ala Phe Arg Asp Ser Pro Val
 195 200 205
 Ser Pro Ser Phe Ser Pro Ala Phe Pro Arg Phe Leu Pro Gln Ser Ala
 210 215 220

Pro Gly Thr Gln Gly Tyr Pro Gly His Ser Gln Ala Ser Arg Asp Tyr
 225 230 235 240
 Phe Pro Met Thr Cys Ile Tyr Arg Gly Met Ala Pro Ile Leu Pro Ser
 245 250 255
 Val Thr Ser Asn Pro Ser Pro Leu Thr Leu Arg His Ser Gln Gly Leu
 260 265 270
 Thr Ala Thr Pro Arg Tyr Cys Pro Ser Ala Arg Ser Pro Gly Pro Ser
 275 280 285
 Thr Ser Gln His Asp Ala Ala Thr Trp Pro Cys Leu His Ile Ser Gly
 290 295 300
 Glu Gly Pro Thr Pro Ser Arg Arg Ala Pro Pro Ala Phe Arg Pro
 305 310 315 320
 His Thr Gln Ala Cys Pro Ser Thr Cys Tyr Cys His Pro Leu Ala Ser
 325 330 335
 Arg Arg Gly Pro Cys Asn Gly Arg Tyr His Arg Pro Val Tyr Pro His
 340 345 350
 Pro Thr Ala Val Gln Arg Asp Pro Pro Ala Gly Pro Arg Gly Cys His
 355 360 365
 Ser Pro Cys Trp His Asp Ala Pro Ala Cys Arg Arg Pro Cys Gly Pro
 370 375 380
 Arg Tyr Arg
 385

<210> 3433

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3433

Met Pro Gly Glu Pro Pro Leu Gly Lys Met Phe Gly Arg Gly Ser Lys
 1 5 10 15
 Gly Ser Thr Glu Asp Gly Leu Glu Leu Arg Gly Ile His Phe Met Val
 20 25 30
 Lys Lys Pro Phe Leu Lys Glu Ser Ser Thr Gln Glu Thr Pro Pro Thr
 35 40 45
 His Ala Ser Leu Pro Pro Lys Thr Arg Leu Cys Leu Ser His Thr Phe
 50 55 60
 Tyr Val Leu Tyr Ile Lys Asn Pro Leu Glu Phe Ser Lys Leu Gly Ile
 65 70 75 80
 Val Val Cys Asp Ala Tyr Leu Lys Arg Gly Glu Arg Val Gly His Gly
 85 90 95
 Gly Ser Arg Leu
 100

<210> 3434

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3434

Met Gln Ala Leu Ser Lys Leu Gly Ser Leu Ser Gln Leu Asp Trp Gly
 1 5 10 15
 Pro Arg Pro Gly Ser Gly Ala Ala Gly Ala Trp Ala Trp Gly Leu Ala
 20 25 30
 Val Ala His Gly Leu Ser Ser Gly Leu Gly Trp Arg Arg Cys Ser Leu
 35 40 45

Ala Ala Cys Ala Val Leu Glu Leu Thr Trp Gly Lys Ala Gly Leu Ala
 50 55 60
 Gly Leu Gly Arg Ala Arg Leu Trp Pro Arg Pro Leu Gly Arg Leu Arg
 65 70 75 80
 Arg Glu Gln Arg Leu Ser Pro Gly Ala Leu Arg Cys Ile Cys Ala Arg
 85 90 95
 Ser Val Ala Arg Cys Leu
 100

<210> 3435

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3435

Met Ser Ser Gln Cys Leu Glu Thr Arg Thr Val Ile Tyr Arg Ser Ile
 1 5 10 15
 Phe Leu Val Phe Leu Lys Val Ser Phe His Asn Thr Arg Ser Ser Leu
 20 25 30
 Pro Leu Val Ser Trp Arg Val His Pro Thr Asp Glu Ser Ser Phe Pro
 35 40 45
 Val Gly Leu Ser His Leu Gly Asn Ser Leu Arg Ser Thr Tyr Gln Pro
 50 55 60
 Arg Lys Lys Leu Pro Gly Tyr Leu Leu Pro Thr Cys Pro Gly Leu Ile
 65 70 75 80
 Asn Thr Lys Gly Gly Lys Leu Lys Gly Ala Ala Asn Trp Ser Thr Trp
 85 90 95
 Lys Gly Gly Ser Thr Leu Asp Trp Cys Leu Ser Phe Ser Ser Phe Phe

100 105 110

Leu Lys Lys Ile Tyr Phe Leu Asn Asn Asn Lys Cys Thr

115 120 125

<210> 3436

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3436

Met Asp Gly Gln Thr Glu Arg Ala Ala Asn Gln Gln Ala Ser Ser Ser

1 5 10 15

Gln Ala Ser His Leu Trp Pro Cys Ile Phe Leu Ser Val Gly Gln Arg

20 25 30

Tyr Lys Glu Ile Arg Gln Lys Tyr Arg Arg Trp Ser Phe Ala Leu Ser

35 40 45

Pro Arg Leu Glu Gly Asn Asp Thr Thr Ile Ala His Trp Ser Leu Glu

50 55 60

Leu Leu Gly Ser His Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Gly

65 70 75 80

Thr Thr Ala Thr His His Cys Gly Gly Leu Thr Gly Gly Val Arg Thr

85 90 95

Glu Val Asn Ser Leu

100

<210> 3437

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3437

Met Thr Pro Pro Pro Lys Thr His Thr His Thr Val Val Ser Tyr His

1 5 10 15

Ser Arg Trp Ala Met Cys Lys Asp Ser Arg Asp Gln Glu Cys Arg Trp

20 25 30

Pro Gln Gln Gly Trp Leu Ser Phe Pro Cys Ser Phe Thr Ser Gly Thr

35 40 45

Ser Ala Gly Lys Gly Leu Ser Ser Trp Asn His Ala Pro Val Ile Gly

50 55 60

Ala Ala Ile Thr Trp Gln Leu Gly Leu Ser Ala Gly Met His Thr Gly

65 70 75 80

Ala Leu Leu Cys Gly Val Ala Ser Ser Ala Cys Leu Asp Phe Phe Tyr

85 90 95

Gly Gly Pro Glu Ile

100

<210> 3438

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3438

Met Leu Ile Leu Gly Ser Met Phe Ser Leu Val Glu Pro Val Leu Thr

1 5 10 15

Ile Ala Ala Ala Leu Ser Val Gln Ser Pro Phe Thr Arg Ser Ala Gln

20	25	30
Ser Ser Pro Glu Cys Ala Ala Ala Arg Arg Pro Leu Glu Ser Asp Gln		
35	40	45
Gly Asp Pro Phe Thr Leu Phe Asn Val Phe Asn Ala Trp Val Gln Val		
50	55	60
Lys Ser Glu Arg Ser Arg Asn Ser Arg Lys Trp Cys Arg Arg Arg Gly		
65	70	75
Ile Glu Glu His Arg Leu Tyr Glu Met Ala Asn Leu Arg Arg Gln Phe		
85	90	95
Lys Glu Leu Leu Glu Asp His Gly Leu Leu Ala Gly Ala Gln Ala Ala		
100	105	110
Gln Val Gly Asp Ser Tyr Ser Arg Leu Gln Gln Arg Arg Glu Arg Arg		
115	120	125
Ala Leu His Gln Leu Arg Arg Gln His Glu Glu Gly Ala Gly Arg Arg		
130	135	140
Arg Lys Val Leu Arg Leu Gln Glu Glu Gln Asp Gly Gly Ser Ser Asp		
145	150	155
Glu Asp Arg Ala Gly Pro Ala Pro Pro Gly Ala Ser Asp Gly Val Asp		
165	170	175
Ile Gln Asp Val Lys Phe Lys Leu Arg His Asp Leu Ala Gln Leu Gln		
180	185	190
Ala Ala Ala Ser Ser Ala Gln Asp Leu Ser Arg Glu Gln Leu Ala Leu		
195	200	205
Leu Lys Leu Val Leu Gly Arg Gly Leu Tyr Pro Gln Leu Ala Val Pro		
210	215	220
Asp Ala Phe Asn Ser Ser Arg Lys Asp Ser Asp Gln Val Gly Pro Val		
225	230	235
Leu Pro His Pro Met Phe Cys Pro Pro Thr His Glu Pro		
245	250	

<210> 3439

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3439

Met Ala Gln Pro Pro Val Thr Leu Leu Cys Ile Cys Ser Glu Val Leu

1

5

10

15

Val Arg Ala Ala Asp Ser Ile Trp Lys Trp Thr Leu Ser Gly Pro Gly

20

25

30

Pro Gly Ser Val Trp Pro Ser Thr Gly Glu Ala Gly Leu Arg Arg Gly

35

40

45

Leu Arg Ala Glu Ala Pro Leu Gln Gln Leu Gln Glu Gly Pro Ala Pro

50

55

60

Gly Glu Glu Cys Leu Gly Arg Ala Trp Gly Leu Arg Val Arg Arg Arg

65

70

75

80

Gly Pro Leu Pro Pro Leu Pro Trp Gly Ser Glu Arg Pro Pro Cys Cys

85

90

95

Leu Glu Gly Ala Trp Gln Leu Glu Trp Glu Gln Arg Pro Gln Gly Gly

100

105

110

Arg Ala Gly Gly Arg Gly Pro Ala Ala Cys Pro Val Pro Arg Lys Val

115

120

125

Thr Ala Cys Phe Glu Ser Ala Ala Lys Lys Ser Val Gly Gln Phe Arg

130

135

140

Gln Leu Ser Pro Glu Leu Pro Arg Glu Thr His Pro Ala Cys Pro Ala

145

150

155

160

Leu Pro Thr Gly Ser Arg Arg Thr Glu Gly Thr Gln Leu Gly Ala Arg

165

170

175

Arg Pro Gly Leu

180

<210> 3440

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3440

Met Pro Ser Phe Thr His Ser Pro Pro Glu His Ser Val Ser Pro Met

1

5

10

15

Val Arg Ala Arg Leu Leu Arg Met Ala Phe Lys Ala Ser Val Pro Ser

20

25

30

Pro Arg Pro Ala Ile Leu Gln Arg Val Arg Ser Ala Ser Pro Gly Pro

35

40

45

Leu Pro Val Leu Leu Cys Glu Ala Pro Cys Pro His Leu Phe Thr Cys

50

55

60

Gln Pro Leu His Phe Leu Arg Val Leu Thr Leu Val Ser Trp Leu Pro

65

70

75

80

Phe Tyr Phe Lys Glu Pro Pro Val Tyr Leu Pro Pro Ser Val Ser Leu

85

90

95

Ile Leu Leu Ala Leu Ser Phe Phe Cys Ile Ile Tyr Tyr Leu Ile Thr

100

105

110

Tyr Lys Lys Met Tyr Thr Leu Met Cys Thr Val Ser Asn Cys

115

120

125

<210> 3441

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3441

Met Pro Val Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Leu

1

5

10

15

Glu Leu Arg Ser Ser Gly Pro Ala Leu Asp Lys Met Val Arg Pro Cys

20

25

30

Leu Cys Gln Lys Asn Thr Glu Val Ser Gln Ala Trp Cys Ser Val Pro

35

40

45

Val Val Ala Ala Thr Gly Glu Ala Glu Val Gly Gly Ser Leu Asp Pro

50

55

60

Arg Arg Ser Gly Leu Gln Trp Ala Val Ile Val Pro Leu His Pro Ser

65

70

75

80

Leu Gly Asp Arg Val Arg Pro Cys Leu Lys Lys Arg Lys Val Lys Ala

85

90

95

Thr Arg Gly Gly Ser Cys Leu Trp Phe Gln His Phe Gly Arg Pro Arg

100

105

110

Arg Val Asp His Leu Arg Trp Gly Val

115

120

<210> 3442

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3442

Met Arg Pro Lys Pro Pro Ser Arg Ala Gly Val Leu Gln Ile Ala Gln
 1 5 10 15

Glu Leu His Arg Lys Ala Glu Gln Thr Pro Pro Arg Pro Arg Pro Arg
 20 25 30

Ser Leu Thr Val Ala Arg Gly Ser Val Gly His Thr Glu Glu Arg Gly
 35 40 45

Gly Val Ala Ala Glu Leu Arg Lys Arg Leu Val Arg Gly Gly Ala Arg
 50 55 60

Arg Gly Ser Arg Asp Gly Gly Arg Gly Arg Gly Gly Val Ala
 65 70 75 80

Gly Gln Arg Ser Gln Glu Gly Trp Gly Ser Gly Arg Arg Ala Arg Val
 85 90 95

Thr Gly Arg Gly Ser Trp Gly Arg Gly Pro Gly Val Ala Ala Arg Gly
 100 105 110

Val Gly Ala Ala Gly Arg Asp Thr Gly Gly Pro Arg Ala Leu Gly Gly
 115 120 125

Gly Cys Lys Ala Trp Ile Thr Leu Met Ser Gly Glu Thr Cys Thr Gly
 130 135 140

Gly Thr Ile Leu Ser Pro Thr Ser Ala Pro Glu Ala Gln Pro Ala Asp
 145 150 155 160

Gly Ala Gly Cys Arg Thr Ser Gln Gln Ser Leu Gly Gly Lys Gly Gly
 165 170 175

Ala Gly Arg Thr His Ala Pro Ser Ala Ala Arg Glu Arg Gly Ala Ala
 180 185 190

Pro Pro Gly Asp Arg Arg Val Thr Ala Arg Pro Arg Ala Ala Val Thr
 195 200 205

Ser Arg Glu Ala His Ala His Lys Gly Trp Gly Val Arg Gly Gly Ser
 210 215 220

Ser Ala Ala Pro Ala Gln Leu Leu Arg Glu Ala Gly Ser Ala Pro Ser
 225 230 235 240
 Gly Arg Gly Val Ser Phe Pro Arg Arg Ala Gly Gly Pro Leu Phe Pro
 245 250 255
 Arg Ala Ala Ala Glu Ala Pro Pro Ser Ala Ser Trp Pro Cys Val His
 260 265 270
 Thr Pro Asp Cys Gly Pro Gly Arg Thr Leu Ser Ser Cys Ala Glu Arg
 275 280 285
 Arg Arg Pro Glu Val Arg Ala Ala Arg Ala Gly Pro Ala Pro Arg Thr
 290 295 300
 Ala Pro Thr Arg Gly Trp Pro Gly Gln Gly Pro Gly Gly Pro Gly Ser
 305 310 315 320
 Gly Val

<210> 3443

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3443

Met Lys Ala Glu Ala Thr Val Ile Pro Ser Arg Cys Ala Arg Gly Leu
 1 5 10 15

Pro Ser Trp Gln Val Leu Ser Pro Val Gln Pro Trp Gln Thr Ser Ala
 20 25 30

Pro Gln Asn Thr Thr Gln Pro Lys Leu Leu Ala Pro His Gln His Asp
 35 40 45

Lys Ser Gln Lys Lys Ser Ser Leu Leu Lys Glu Leu Gly Ala Phe His

50	55	60
Ile Thr Ile Ala Leu Leu His Leu Val Phe Gly Gly Tyr Leu Ala Ser		
65	70	75
Ile Val Lys Asn Leu His Leu Val Val Leu Lys Ser Trp Tyr Pro Phe		80
85	90	95
Trp Gly Ala Ala Ser Phe Leu Ile Ser Gly Ile Leu Ala Ile Thr Met		
100	105	110
Lys Thr Phe Ser Lys Thr Tyr Leu Lys Met Leu Cys Leu Met Thr Asn		
115	120	125
Leu Ile Ser Leu Phe Cys Val Leu Ser Gly Leu Phe Val Ile Ser Lys		
130	135	140
Asp Leu Phe Leu Glu Ser Pro Phe Glu Ser Pro Ile Trp Arg Met Tyr		
145	150	155
Pro Asn Ser Thr Val His Ile Gln Arg Leu Glu Leu Ala Leu Cys		160
165	170	175
Phe Thr Val Leu Glu Leu Phe Leu Pro Val Pro Thr Ala Val Thr Ala		
180	185	190
Trp Arg Gly Asp Cys Pro Ser Ala Lys Asn Asp Asp Ala Cys Leu Val		
195	200	205
Pro Asn Thr Pro Leu His Leu Lys Gly Leu Pro Val Glu Pro Pro Pro		
210	215	220
Ser Tyr Gln Ser Val Ile Gln Gly Asp Ala Gln His Lys Gln His Gln		
225	230	235
Arg Leu Arg Glu Val Lys Gln Val Ala Pro Asp Thr Trp Ile Val Thr		240
245	250	255
Asp Gly Ala Ala Ile Trp Ala Gln Thr Ala Asn		
260	265	

<210> 3444

<211> 497

<212> PRT

<213> Homo sapiens

<400> 3444

Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Val Val Ile Ile Lys Gly

1 5 10 15

Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Thr

20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe

35 40 45

Gly Asp Phe Tyr Met Thr Trp Leu Arg Gln Val Pro Gly Lys Asp Leu

50 55 60

Glu Trp Leu Ala Tyr Ile Ser Ser Asn Gly Gly Tyr Ser Glu Tyr Ala

65 70 75 80

Asp Ser Val Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Val Lys Asn

85 90 95

Ser Leu His Leu Gln Met Asn Ser Leu Arg Ala Gln Asp Thr Ala Ile

100 105 110

Tyr Tyr Cys Ala Arg Phe Thr Val Ser Met Asp Thr Val Ala Tyr Ser

115 120 125

Tyr Gly Leu Asp Val Trp Gly Pro Gly Thr Ala Val Thr Val Ser Ser

130 135 140

Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr

145 150 155 160

Gln Pro Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe

165 170 175

Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val

180	185	190
Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr		
195	200	205
Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly		
210	215	220
Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp		
225	230	235
Val Thr Val Pro Cys Pro Val Pro Ser Thr Pro Pro Thr Pro Ser Pro		
245	250	255
Ser Thr Pro Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg Leu Ser		
260	265	270
Leu His Arg Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu Ala Asn		
275	280	285
Leu Thr Cys Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly Val Thr Phe		
290	295	300
Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Glu		
305	310	315
Arg Asp Leu Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys		
325	330	335
Ala Glu Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr		
340	345	350
Pro Glu Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn		
355	360	365
Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu		
370	375	380
Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser		
385	390	395
Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro		
405	410	415

Arg Glu Lys Tyr Leu Thr Trp Ala Ser Trp Gln Glu Pro Ser Gln Gly
 420 425 430
 Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp
 435 440 445
 Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu
 450 455 460
 Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro
 465 470 475 480
 Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys
 485 490 495
 Tyr

<210> 3445
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 3445
 Met Ala Gly Leu Ala Arg Arg Val Val Gly Ala Phe Leu Leu Phe His
 1 5 10 15
 Phe Lys Gln Lys Ser Gly Ala Glu Thr Gly Glu Ala Ala Leu His Leu
 20 25 30
 Gly Arg Ser Pro Val Leu Pro Ala Arg Ala Gly Ile Leu Arg Thr Cys
 35 40 45
 Leu Ser Leu Arg Ala Val Thr Ser Pro Gln Asp Phe Gly Ser Ala Gln
 50 55 60
 Arg Thr Arg Ser Ala Pro Leu Gly Pro Ile Asn Gln Ala Ser Arg Arg

65	70	75	80
Val Gln Pro Gly Lys Ala Asn Pro Glu Arg Arg Ala Asn Asp Ser Asp			
85	90	95	
Ser Gln Gly Lys Ala			
100			

<210> 3446

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3446

Met His Gly Glu Lys Ser His Gly Arg Gly Gln Ala Gly Arg Gln Val

1	5	10	15
---	---	----	----

Pro Leu Lys Gln Gln Ser Val Ser Gly Glu Ser Gln Gln Gly Ala Arg

20	25	30
----	----	----

Gln Gly Ala Gly Gln Ser Thr Cys Tyr Leu Ser Ser Ala Phe Leu Cys

35	40	45
----	----	----

Asn Gly Ser Phe Pro Ala Gly Ser Met Ser Leu Trp Asp Pro Gln Pro

50	55	60
----	----	----

Lys Gln Ala Phe Pro Ser Val Leu Trp Cys Ser Trp Ala Gly Val Pro

65	70	75	80
----	----	----	----

Gly Arg Arg Thr Gly Gln Arg Asp Pro Arg Val Gln Glu Arg Arg Gly

85	90	95
----	----	----

Asp Phe Val Ser Lys Leu Gly Ala Ala Val Gly Gly Glu Pro Leu Ala

100	105	110
-----	-----	-----

Leu Phe Gly Pro His Ser Trp Pro Gly Met Gly His Arg Val Pro Gly

115	120	125
-----	-----	-----

Leu Gly Ala Gly Phe Leu Leu Phe Ala Gly Phe Ala Leu Glu Pro Trp
 130 135 140
 Asp Ser Tyr His Val Val Phe Glu Gly Trp Thr Ile Asp Met Arg Arg
 145 150 155 160
 Asn Glu Pro Glu Arg Thr Arg Ser Leu Ser Ala Pro Gly Pro Leu
 165 170 175

<210> 3447

<211> 487

<212> PRT

<213> Homo sapiens

<400> 3447

Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Glu Gly
 1 5 10 15
 Val His Cys Glu Ala Gln Val Val Glu Ser Gly Gly Leu Val Gln
 20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe
 35 40 45

Ser Ser Phe Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60

Glu Trp Val Ala Ser Ile Asn Lys Asp Gly Arg Asp Ser Tyr Tyr Val
 65 70 75 80

Glu Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Thr
 85 90 95

Ser Leu Tyr Leu Gln Met Gly Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110

Tyr Tyr Cys Ala Arg Lys Phe Met Phe Asp Ser Trp Ser Ser Tyr Tyr

115	120	125
Val Glu Gly His Tyr Phe Asp Leu Trp Gly Arg Gly Thr Gln Val Thr		
130	135	140
Val Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu		
145	150	155
Asp Ser Thr Pro Gln Asp Gly Asn Val Val Ala Cys Leu Val Gln		
165	170	175
Gly Phe Phe Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly		
180	185	190
Gln Asn Val Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly		
195	200	205
Asp Leu Tyr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys		
210	215	220
Pro Asp Gly Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro		
225	230	235
Ser Gln Asp Val Thr Val Pro Cys Pro Val Pro Pro Pro Pro Cys		
245	250	255
Cys His Pro Arg Leu Ser Leu His Arg Pro Ala Leu Glu Asp Leu Leu		
260	265	270
Leu Gly Ser Glu Ala Asn Leu Thr Cys Thr Leu Thr Gly Leu Arg Asp		
275	280	285
Ala Ser Gly Ala Thr Phe Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala		
290	295	300
Val Gln Gly Pro Pro Glu Arg Asp Leu Cys Gly Cys Tyr Ser Val Ser		
305	310	315
Ser Val Leu Pro Gly Cys Ala Gln Pro Trp Asn His Gly Glu Thr Phe		
325	330	335
Thr Cys Thr Ala Ala His Pro Glu Leu Lys Thr Pro Leu Thr Ala Asn		
340	345	350

Ile Thr Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro
 355 360 365
 Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys
 370 375 380
 Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln
 385 390 395 400
 Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg
 405 410 415
 Gln Glu Pro Ser Gln Gly Thr Thr Phe Ala Val Thr Ser Ile Leu
 420 425 430
 Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met
 435 440 445
 Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp
 450 455 460
 Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala
 465 470 475 480
 Glu Val Asp Gly Thr Cys Tyr
 485

<210> 3448

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3448

Met Ala Ser Phe Pro Leu Leu Leu Thr Leu Leu Thr His Cys Ala Gly

1

5

10

15

Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr

20	25	30
Pro Gly Gln Thr Val Thr Ile Ser Cys Ser Gly Ala Ser Ser Asn Ile		
35	40	45
Gly Arg Asn Ser Val Asn Trp Phe Gln Gln Leu Pro Gly Thr Ala Pro		
50	55	60
Lys Leu Leu Asn His Asn Asn Gln Arg Pro Ala Gly Val Pro Asp		
65	70	75
Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser		
85	90	95
Gly Leu His Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp		
100	105	110
Asn Ser Leu Asn Gly Trp Val Phe Gly Gly Thr Lys Leu Thr Val		
115	120	125
Leu Gly Glu Ser Leu Leu Pro Ser Pro Ser Pro Leu Leu Gly Gln Phe		
130	135	140
Leu Leu Phe Leu Phe Val Ser Leu Cys Cys Leu Lys Leu Trp Ser Asp		
145	150	155
Phe Leu Pro Thr Ser Gln Ala		
165		

<210> 3449

<211> 425

<212> PRT

<213> Homo sapiens

<400> 3449

Met Val Pro Glu Gly Leu Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr

1

5

10

15

Pro Arg Gln Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp Phe
 20 25 30
 Lys Ala Val Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr Asn His
 35 40 45
 Gln Ser Arg Glu Val Glu Met Ser Thr Arg Gly Arg Phe Gln Leu Thr
 50 55 60
 Gly Asp Pro Ala Lys Gly Asn Cys Ser Leu Val Ile Arg Asp Ala Gln
 65 70 75 80
 Met Gln Asp Glu Ser Gln Tyr Phe Phe Arg Val Glu Arg Gly Ser Tyr
 85 90 95
 Val Arg Tyr Asn Phe Met Asn Asp Gly Phe Phe Leu Lys Val Thr Val
 100 105 110
 Leu Ser Phe Thr Pro Arg Pro Gln Asp His Asn Thr Asp Leu Thr Cys
 115 120 125
 His Val Asp Phe Ser Arg Lys Gly Val Ser Val Gln Arg Thr Val Arg
 130 135 140
 Leu Arg Val Ala Tyr Ala Pro Arg Asp Leu Val Ile Ser Ile Ser Arg
 145 150 155 160
 Asp Asn Thr Pro Asp Pro Pro Glu Asn Leu Arg Val Met Val Ser Gln
 165 170 175
 Ala Asn Arg Thr Val Leu Glu Asn Leu Gly Asn Gly Thr Ser Leu Pro
 180 185 190
 Val Leu Glu Gly Gln Ser Leu Cys Leu Val Cys Val Thr His Ser Ser
 195 200 205
 Pro Pro Ala Arg Leu Ser Trp Thr Gln Arg Gly Gln Val Leu Ser Pro
 210 215 220
 Ser Gln Pro Ser Asp Pro Gly Val Leu Glu Leu Pro Arg Val Gln Val
 225 230 235 240
 Glu His Glu Gly Glu Phe Thr Cys His Ala Arg His Pro Leu Gly Ser

245	250	255
Gln His Val Ser Leu Ser Leu Ser Val His Tyr Lys Lys Gly Leu Ile		
260	265	270
Ser Thr Ala Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile Thr Ala		
275	280	285
Leu Leu Phe Leu Cys Leu Ala Leu Ile Ile Met Lys Ile Leu Pro Lys		
290	295	300
Arg Arg Thr Gln Thr Glu Thr Pro Arg Pro Arg Phe Ser Arg His Ser		
305	310	315
Thr Ile Leu Asp Tyr Ile Asn Val Val Pro Thr Ala Gly Pro Leu Val		
325	330	335
Gln Lys Arg Asn Gln Lys Ala Thr Pro Ser Ser Pro Arg Thr Pro Leu		
340	345	350
Pro Pro Gly Ala Pro Ser Pro Glu Ser Lys Lys Asn Gln Lys Lys Gln		
355	360	365
Tyr Gln Leu Pro Ser Phe Pro Glu Pro Lys Ser Ser Thr Gln Ala Pro		
370	375	380
Glu Ser Gln Glu Ser Gln Glu Glu Leu His Tyr Ala Thr Leu Asn Phe		
385	390	395
Pro Gly Val Arg Pro Arg Pro Glu Ala Arg Met Pro Lys Gly Thr Gln		
405	410	415
Ala Asp Tyr Ala Glu Val Lys Phe Gln		
420	425	

<210> 3450

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3450

Met Val Thr Leu Arg Ser Lys Leu Gly Pro Leu Glu Ile Gln Gln Phe
 1 5 10 15

Ala Met Leu Leu Arg Glu Tyr Arg Leu Gly Leu Pro Ile Gln Asp Tyr
 20 25 30

Cys Thr Gly Leu Leu Lys Leu Tyr Gly Asp Arg Arg Lys Phe Leu Leu
 35 40 45

Leu Gly Met Arg Pro Phe Ile Pro Asp Gln Asp Ile Gly Tyr Phe Glu
 50 55 60

Gly Phe Leu Glu Gly Val Gly Ile Arg Glu Gly Gly Ile Leu Thr Asp
 65 70 75 80

Ser Phe Gly Arg Ile Lys Arg Ser Met Ser Ser Thr Ser Ala Ser Ala
 85 90 95

Val Arg Ser Tyr Asp Gly Ala Ala Gln Arg Pro Glu Ala Gln Ala Phe
 100 105 110

His Arg Leu Leu Ala Asp Ile Thr His Asp Ile Glu Ala Leu Ala Pro
 115 120 125

Asp Asp Asp Asp Asp Asp Glu Asp Pro Arg Gly Ser Arg Gly Gly
 130 135 140

Ser Asp Ala Ala Glu Asp Asn Tyr Leu
 145 150

<210> 3451

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3451

Met Arg Arg Asp Val Asn Gly Val Thr Lys Ser Arg Phe Glu Met Phe
 1 5 10 15
 Ser Asn Ser Asp Glu Ala Val Ile Asn Lys Lys Leu Pro Lys Glu Leu
 20 25 30
 Leu Leu Arg Ile Phe Ser Phe Leu Asp Val Val Thr Leu Cys Arg Cys
 35 40 45
 Ala Gln Val Ser Arg Ala Trp Asn Val Leu Ala Leu Asp Gly Ser Asn
 50 55 60
 Trp Gln Arg Ile Asp Leu Phe Asp Phe Gln Arg Asp Ile Glu Gly Arg
 65 70 75 80
 Val Val Glu Asn Ile Ser Lys Arg Cys Gly Gly Phe Leu Arg Lys Leu
 85 90 95
 Ser Leu Arg Gly Cys Leu Gly Val Gly Asp Asn Ala Leu Arg Thr Phe
 100 105 110
 Ala Gln Asn Cys Arg Asn Ile Glu Val Leu Asn Leu Asn Gly Cys Thr
 115 120 125
 Lys Thr Thr Asp Ala Thr Cys Thr Ser Leu Ser Lys Phe Cys Ser Lys
 130 135 140
 Leu Arg His Leu Asp Leu Ala Ser Cys Thr Ser Ile Thr Asn Met Ser
 145 150 155 160
 Leu Lys Ala Leu Ser Glu Gly Cys Pro Leu Leu Glu Gln Leu Asn Ile
 165 170 175
 Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile Gln Ala Leu Val Arg
 180 185 190
 Gly Cys Gly Gly Leu Lys Ala Leu Phe Leu Lys Gly Cys Thr Gln Leu
 195 200 205
 Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His Cys Pro Glu Leu Val
 210 215 220

Thr Leu Asn Leu Gln Thr Cys Leu Gln Ile Thr Asp Glu Gly Leu Ile
 225 230 235 240
 Thr Ile Cys Arg Gly Cys His Lys Leu Gln Ser Leu Cys Ala Ser Gly
 245 250 255
 Cys Ser Asn Ile Thr Asp Ala Ile Leu Asn Ala Leu Gly Gln Asn Cys
 260 265 270
 Pro Arg Leu Arg Ile Leu Glu Val Ala Arg Cys Ser Gln Leu Thr Asp
 275 280 285
 Val Gly Phe Thr Thr Leu Ala Arg Asn Cys His Glu Leu Glu Arg Met
 290 295 300
 Asp Leu Glu Glu Cys Val Gln Ile Thr Asp Ser Thr Leu Ile Gln Leu
 305 310 315 320
 Ser Ile His Cys Pro Arg Leu Gln Val Leu Ser Leu Ser His Cys Glu
 325 330 335
 Leu Ile Thr Asp Asp Gly Ile Arg His Leu Gly Asn Gly Ala Cys Ala
 340 345 350
 His Asp Gln Leu Glu Val Ile Glu Leu Asp Asn Cys Pro Leu Ile Thr
 355 360 365
 Asp Ala Ser Leu Glu His Leu Lys Ser Cys His Ser Leu Glu Arg Ile
 370 375 380
 Glu Leu Tyr Asp Cys Gln Gln Ile Thr Arg Ala Gly Ile Lys Arg Leu
 385 390 395 400
 Arg Thr His Leu Pro Asn Ile Lys Val Tyr Ala Tyr Phe Ser Pro Val
 405 410 415
 Thr Pro Pro Pro Ser Val Gly Gly Ser Arg Gln Arg Phe Cys Arg Cys
 420 425 430
 Cys Ile Ile Leu
 435

<210> 3452

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3452

Met Gly Ala Thr Glu Ala Ala Gly Gly Ala Ala Val Ser Arg Ala Arg

1 5 10 15

Asn Gln Thr Trp Thr Ala Leu Gly Pro Gly Cys Arg Asp Gln Val Thr

20 25 30

Arg Ser Pro Glu Gly Cys Trp Pro Arg Ser Gln Asn Pro Gly Ala Ala

35 40 45

Arg Thr Ile Gly Ser Ser Leu Tyr Gly Thr Gly Asp Arg His Pro Ala

50 55 60

Leu Val Pro Cys Ala Val Ala Asp Gly Glu Thr Glu Ala Ser Ser Leu

65 70 75 80

Pro Gly Ile Thr Val Ile Leu Glu Gln Arg Gly Pro Glu Arg Ala Cys

85 90 95

Ser Trp Pro Lys Val Thr Gln

100

<210> 3453

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3453

Met Ala Ser Asp Asp Phe Asp Ile Val Ile Glu Ala Met Leu Glu Ala
 1 5 10 15
 Pro Tyr Lys Lys Glu Glu Asp Glu Gln Gln Arg Lys Glu Val Lys Lys
 20 25 30
 Asp Tyr Pro Ser Asn Thr Thr Ser Ser Thr Ser Asn Ser Gly Asn Glu
 35 40 45
 Thr Ser Gly Ser Ser Thr Ile Gly Glu Thr Ser Lys Lys Lys Arg Ser
 50 55 60
 Arg Ser His Asn Lys Ser Arg Asp Arg Lys Arg Ser Arg Ser Arg Asp
 65 70 75 80
 Arg Asp Arg Tyr Arg Arg Arg Asn Ser Arg Ser Arg Ser Pro Gly Arg
 85 90 95
 Gln Cys Arg His Arg Ser Arg Ser Trp Asp Arg Arg His Gly Ser Glu
 100 105 110
 Ser Arg Ser Arg Asp His Arg Arg Glu Asp Arg Val His Tyr Arg Ser
 115 120 125
 Pro Pro Leu Ala Thr Gly Tyr Arg Tyr Gly His Ser Lys Ser Pro His
 130 135 140
 Phe Arg Glu Lys Ser Pro Val Arg Glu Pro Val Asp Asn Leu Ser Pro
 145 150 155 160
 Glu Glu Arg Asp Ala Arg Thr Val Phe Cys Met Gln Leu Ala Ala Arg
 165 170 175
 Ile Arg Pro Arg Asp Leu Glu Asp Phe Phe Ser Ala Val Gly Lys Val
 180 185 190
 Arg Asp Val Cys Ile Ile Ser Asp Arg Asn Ser Arg Arg Ser Lys Gly
 195 200 205
 Ile Ala Tyr Val Glu Phe Cys Glu Ile Gln Ser Val Pro Leu Ala Ile
 210 215 220
 Gly Leu Thr Gly Gln Arg Leu Leu Gly Val Pro Ile Ile Val Gln Ala

225	230	235	240
Ser Gln Ala Glu Lys Asn Arg Leu Ala Ala Met Ala Asn Asp Leu Gln			
245	250	255	
Lys Gly Asn Gly Gly Pro Met Arg Leu Tyr Val Gly Ser Leu His Phe			
260	265	270	
Asn Ile Thr Glu Asp Met Leu Arg Gly Ile Phe Glu Pro Phe Gly Lys			
275	280	285	
Ile Asp Asn Ile Val Leu Met Lys Asp Ser Asp Thr Gly Arg Ser Lys			
290	295	300	
Gly Tyr Gly Phe Ile Thr Leu His Pro Pro Pro Leu Gly Thr Val			
305	310	315	

<210> 3454

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3454

Met Gly Lys Arg Asp Pro Arg Ala Gln Leu Phe Leu Pro Ser Ala Gly			
1	5	10	15
Leu Leu Gln Thr Ser Arg Leu His Cys Arg Leu Arg His Phe Leu Ala			
20	25	30	
Glu Pro Pro Ser Phe Leu Leu Ser Phe Gln Leu Leu Leu His Cys			
35	40	45	
Pro Phe Leu Ser Pro Leu Ser Cys Thr Ser Ala Ser Ile Leu Ala Ser			
50	55	60	
Ser Ser Leu Lys Thr Gln Pro Asp Thr Ile Ser Ile Ile Thr Leu Phe			
65	70	75	80

Ile Ser Gln Trp Arg Arg Trp Gly Ser Arg Gln Glu Arg Gln Ser Val
 85 90 95
 Asn Met Leu Pro Leu Lys Phe Cys Thr Ala Leu Ser Leu Leu Gly Leu
 100 105 110
 Trp Ala Lys Ile Lys Cys Lys Ser Leu Tyr Tyr Ser
 115 120

<210> 3455

<211> 375

<212> PRT

<213> Homo sapiens

<400> 3455

Met Glu Asp Ser Glu Ala Leu Gly Phe Glu His Met Gly Leu Asp Pro

1 5 10 15

Arg Leu Leu Gln Ala Val Thr Asp Leu Gly Trp Ser Arg Pro Thr Leu

20 25 30

Ile Gln Glu Lys Ala Ile Pro Leu Ala Leu Glu Gly Lys Asp Leu Leu

35 40 45

Ala Arg Ala Arg Thr Gly Ser Gly Lys Thr Ala Ala Tyr Ala Ile Pro

50 55 60

Met Leu Gln Leu Leu His Arg Lys Ala Thr Gly Pro Val Val Glu

65 70 75 80

Gln Ala Val Arg Gly Leu Val Leu Val Pro Thr Lys Glu Leu Ala Arg

85 90 95

Gln Ala Gln Ser Met Ile Gln Gln Leu Ala Thr Tyr Cys Ala Arg Asp

100 105 110

Val Arg Val Ala Asn Val Ser Ala Ala Glu Asp Ser Val Ser Gln Arg

115	120	125
Ala Val Leu Met Glu Lys Pro Asp Val Val Val Gly Thr Pro Ser Arg		
130	135	140
Ile Leu Ser His Leu Gln Gln Asp Ser Leu Lys Leu Arg Asp Ser Leu		
145	150	155
Glu Leu Leu Val Val Asp Glu Ala Asp Leu Leu Phe Ser Phe Gly Phe		
165	170	175
Glu Glu Glu Leu Lys Ser Leu Leu Cys His Leu Pro Arg Ile Tyr Gln		
180	185	190
Ala Phe Leu Met Ser Ala Thr Phe Asn Glu Asp Val Gln Ala Leu Lys		
195	200	205
Glu Leu Ile Leu His Asn Pro Val Thr Leu Lys Leu Gln Glu Ser Gln		
210	215	220
Leu Pro Gly Pro Asp Gln Leu Gln Gln Phe Gln Val Val Cys Glu Thr		
225	230	235
Glu Glu Asp Lys Phe Leu Leu Tyr Ala Leu Leu Lys Leu Ser Leu		
245	250	255
Ile Arg Gly Lys Ser Leu Leu Phe Val Asn Thr Leu Glu Arg Ser Tyr		
260	265	270
Arg Leu Arg Leu Phe Leu Glu Gln Phe Ser Ile Pro Thr Cys Val Leu		
275	280	285
Asn Gly Glu Leu Pro Leu Arg Ser Arg Cys His Ile Ile Ser Gln Phe		
290	295	300
Asn Gln Gly Phe Tyr Asp Cys Val Ile Ala Thr Asp Ala Glu Val Leu		
305	310	315
Gly Ala Pro Val Lys Gly Lys Arg Arg Gly Arg Gly Pro Lys Gly Asp		
325	330	335
Lys Ala Ser Asp Pro Glu Ala Gly Val Ala Arg Gly Ile Asp Phe His		
340	345	350

His Val Ser Ala Val Leu Asn Phe Asp Leu Pro Pro Thr Pro Glu Ala

355 360

365

Tyr Ile His Arg Ala Gly Arg

370 375

<210> 3456

<211> 309

<212> PRT

<213> Homo sapiens

<400> 3456

Met Leu Pro Glu Asp Ser Gly Gly Ser Pro Asp Ala Ala Ala Ser Asp

1 5 10 15

Lys His Ile Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val Trp

20 25 30

Ile Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu Ile Ser Glu

35 40 45

Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala Glu

50 55 60

Glu Leu Trp Arg Gln Lys Glu Ala Glu Ile Thr Lys Lys Phe Arg Asp

65 70 75 80

Ala Leu Ala Asn Glu Lys Ala Arg Ile Leu Ala Glu Lys Trp Lys Val

85 90 95

Glu Met Glu Asp Arg Lys Ala Ala Lys Val Leu Glu Glu Arg Ile His

100 105 110

Glu Glu Phe Lys Arg Lys Glu Glu Glu Glu Arg Lys Arg Gly Glu Glu

115 120 125

Gln Ile Arg Leu Gln Glu Glu Gln Arg Ala Lys Glu Leu Tyr Trp Thr

130	135	140
Leu Lys Gln Ala Gln Leu His Cys Gln Ala Ser Glu Lys Glu Glu Arg		
145	150	155
Glu Trp Glu Glu Gln Leu Arg Arg Ser Lys Ala Ala Asp Glu Glu Arg		
165	170	175
Ser Arg Arg Ala Gln Arg Ala Arg Asp Glu Tyr Arg His His Ser Leu		
180	185	190
Arg Ala Ile Gln Lys Gly Thr Val Ala Gly Leu Ser Ser Met Phe Arg		
195	200	205
Glu Leu Gly Gln Ser His Glu Gln Glu Ala Arg Leu Tyr His His Leu		
210	215	220
Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Ser Arg Thr		
225	230	235
Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp		
245	250	255
Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr		
260	265	270
Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg		
275	280	285
Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg		
290	295	300
Leu Pro Ser Val Val		
305		

<210> 3457

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3457

Met Gln Ala Ser Leu Leu Leu Ser Cys Leu Pro Leu Ser Ser Leu Ser
 1 5 10 15
 Thr Val Ile Val Pro Pro Phe Leu Gln Val Asn Asp Leu Asp Gly Tyr
 20 25 30
 Asn Arg Thr Ala Leu His Tyr Ala Ala Glu Lys Asp Glu Ala Cys Val
 35 40 45
 Glu Val Leu Leu Glu Tyr Gly Ala Asn Pro Asn Ala Leu Asp Gly Asn
 50 55 60
 Arg Asp Thr Pro Leu His Trp Ala Ala Phe Lys Asn Asn Ala Glu Cys
 65 70 75 80
 Val Arg Ala Leu Leu Glu Ser Gly Ala Ser Val Asn Ala Leu Asp Tyr
 85 90 95
 Asn Asn Asp Thr Pro Leu Ser Trp Ala Ala Met Lys Gly Asn Leu Glu
 100 105 110
 Ser Val Ser Ile Leu Leu Asp Tyr Gly Ala Glu Val Arg Val Ile Asn
 115 120 125
 Leu Ile Gly Gln Thr Pro Ile Ser Arg Leu Val Ala Leu Leu Val Arg
 130 135 140
 Gly Leu Gly Thr Glu Lys Glu Asp Ser Cys Phe Glu Leu Leu His Arg
 145 150 155 160
 Ala Val Gly His Phe Glu Leu Arg Lys Asn Gly Thr Met Pro Arg Glu
 165 170 175
 Val Ala Arg Asp Pro Gln Leu Cys Glu Lys Leu Thr Val Leu Cys Ser
 180 185 190
 Ala Pro Gly Thr Leu Lys Thr Leu Ala Arg Tyr Ala Val Arg Arg Ser
 195 200 205
 Leu Gly Leu Gln Tyr Leu Pro Asp Ala Val Lys Gly Leu Pro Leu Pro

210	215	220
Ala Ser Leu Lys Glu Tyr Leu Leu Leu Leu Glu		
225	230	235

<210> 3458
<211> 123
<212> PRT
<213> Homo sapiens

<400> 3458			
Met Gln Gly Met Gly Leu Gly Leu Ser Ser Val Phe Ala Leu Cys Leu			
1	5	10	15
Gly His Thr Ser Ser Phe Cys Glu Ser Val Val Phe Ala Ser Ala Ser			
20	25	30	
Ile Gly Leu Gln Thr Phe Asn His Ser Gly Ile Ser Val Asn Ile Gln			
35	40	45	
Asp Leu Ala Pro Ser Cys Ala Gly Phe Leu Phe Gly Val Ala Asn Thr			
50	55	60	
Ala Gly Ala Leu Ala Gly Val Val Gly Val Cys Leu Gly Gly Tyr Leu			
65	70	75	80
Met Glu Thr Thr Gly Ser Trp Thr Cys Leu Phe Asn Leu Val Ala Ile			
85	90	95	
Ile Ser Asn Leu Gly Leu Cys Thr Phe Leu Val Phe Gly Gln Ala Gln			
100	105	110	
Arg Val Asp Leu Ser Ser Thr His Glu Asp Leu			
115	120		

<210> 3459

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3459

Met Lys Val Lys Gln Ala Leu Met Val Thr Leu Thr Gln Gln Asp Arg

1 5 10 15

Tyr Pro Tyr Gln Lys Gly Ile Ser Gly His Arg Asp Arg Arg Ala Arg

20 25 30

Val Glu Thr Pro Glu Asp Glu Asp Gly Ile Tyr Gln Ala Gly Glu Trp

35 40 45

Pro Gln Glu Lys Arg Ala Leu Pro Thr Pro Arg Pro Arg Thr Ser Ser

50 55 60

Leu Gln Ser Arg Val Lys Arg Asn Phe His His Leu Ser Cys Pro Val

65 70 75 80

Cys Gly Thr Leu Pro Arg Gln Pro Glu Gln Thr Val Gln Ala Pro Lys

85 90 95

Thr Leu Ser Ala Cys Val Ile Leu Ala Arg Thr Thr Leu Pro Glu Ala

100 105 110

Thr Ala Met Ser Lys Leu Ile Val Arg Phe Leu Pro Ala Thr Trp Phe

115 120 125

<210> 3460

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3460

Met	Leu	Arg	Leu	Arg	Lys	Gln	Gly	His	Val	Arg	Arg	Arg	Gly	Lys	Ser
1			5					10					15		
Ile	Gly	Glu	Asn	Lys	Asp	Thr	Gly	Gly	Asp	Ala	Thr	Trp	Arg	Ser	Pro
	20					25						30			
Glu	Ser	Arg	Glu	Thr	Asn	Glu	Pro	Arg	Thr	Gln	Met	Ala	Lys	Lys	Lys
	35				40					45					
Asn	Glu	Arg	Ile	Cys	Lys	Arg	Gln	His	Ser	Asn	Met	Pro	Asn	Lys	Ser
	50				55					60					
Arg	Val	Leu	Val	Phe	Lys	His	Leu	Tyr	Leu	Pro	Arg	Val	Thr	Arg	Gln
	65			70				75				80			
Leu	Ile	Ser	Phe	His	Ile	Cys	Ser	Arg	Phe	Val	Phe	Arg	Asn	Lys	Thr
	85				90					95					
His	Val	Leu	Lys	Ser	Cys	Leu	Tyr	Val	Ala	Pro	Val	Leu	Leu	Pro	Pro
	100				105					110					
Pro	Pro	Val	Leu	Lys	Ser	Ile	Ser	Ala	Leu	Leu	Ile	Tyr	Gly		
	115				120					125					

<210> 3461

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3461

Met	Glu	Phe	Gly	Leu	Ser	Trp	Ile	Phe	Leu	Val	Val	Thr	Leu	Lys	Gly
1				5				10				15			
Val	His	Cys	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Leu	Val	Lys	
	20				25					30					

Pro Gly Gly Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Asn Thr Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Gly Arg Ile Ser Thr Asp Ser Glu Gly Ala Thr Val Asp
 65 70 75 80
 Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser
 85 90 95
 Lys Lys Thr Leu Tyr Leu Gln Met Asn Ser Leu Gln Val Glu Asp Thr
 100 105 110
 Ala Val Tyr Tyr Cys Ser Thr Gly Pro Ser Arg Val Pro Gly Thr Gln
 115 120 125
 Arg Tyr Phe Asp Phe Trp Gly Arg Gly Thr Arg Val Thr Val Ser Ser
 130 135 140
 Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
 145 150 155 160
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 165 170 175
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 180 185 190
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 195 200 205
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 210 215 220
 Tyr Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 225 230 235 240
 Arg Val Glu Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro
 245 250 255
 Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg

260	265	270
Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys		
275	280	285
Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro		
290	295	300
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys		
305	310	315
Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val		
325	330	335
Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Lys Trp Tyr		
340	345	350
Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu		
355	360	365
Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Leu His		
370	375	380
Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys		
385	390	395
Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln		
405	410	415
Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met		
420	425	430
Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro		
435	440	445
Ser Asp Ile Ala Val Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn Asn		
450	455	460
Tyr Asn Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu		
465	470	475
Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile		
485	490	495

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln

500

505

510

Lys Ser Leu Ser Leu Ser Pro Gly Lys

515

520

<210> 3462

<211> 551

<212> PRT

<213> Homo sapiens

<400> 3462

Met Ile Ser Pro Asp Pro Arg Pro Ser Pro Gly Leu Ala Arg Trp Ala

1

5

10

15

Glu Ser Tyr Glu Ala Lys Cys Glu Arg Arg Gln Glu Ile Arg Glu Ser

20

25

30

Arg Arg Cys Arg Pro Asn Val Thr Thr Cys Arg Gln Val Gly Lys Thr

35

40

45

Leu Arg Ile Gln Gln Arg Glu Gln Leu Gln Arg Ala Arg Leu Gln Gln

50

55

60

Phe Phe Arg Arg Arg Asn Leu Glu Leu Glu Lys Gly Lys Ala Gln

65

70

75

80

His Pro Gln Ala Arg Glu Gln Gly Pro Ser Arg Arg Pro Gly Gln Val

85

90

95

Thr Val Leu Lys Glu Pro Leu Ser Cys Ala Arg Arg Ile Ser Ser Pro

100

105

110

Arg Glu Gln Val Thr Gly Thr Ser Ser Glu Val Phe Pro Ala Gln His

115

120

125

Pro Pro Pro Ser Gly Ile Cys Arg Asp Leu Ser Asp His Leu Ser Ser

130	135	140
Gln Ala Gly Gly Leu Pro Pro Gln Asp Thr Pro Ile Lys Lys Pro Pro		
145	150	155
Lys His His Arg Gly Thr Gln Thr Lys Ala Glu Gly Pro Thr Ile Lys		
165	170	175
Asn Asp Ala Ser Gln Gln Thr Asn Tyr Gly Val Ala Val Leu Asp Lys		
180	185	190
Glu Ile Ile Gln Leu Ser Asp Tyr Leu Lys Glu Ala Leu Gln Arg Glu		
195	200	205
Leu Val Leu Lys Gln Lys Met Val Ile Leu Gln Asp Leu Leu Ser Thr		
210	215	220
Leu Ile Gln Ala Ser Asp Ser Ser Trp Lys Gly Gln Leu Asn Glu Asp		
225	230	235
Lys Leu Lys Gly Lys Leu Arg Ser Leu Glu Asn Gln Leu Tyr Thr Cys		
245	250	255
Thr Gln Lys Tyr Ser Pro Trp Gly Met Lys Lys Val Leu Leu Glu Met		
260	265	270
Glu Asp Gln Lys Asn Ser Tyr Glu Gln Lys Ala Lys Glu Ser Leu Gln		
275	280	285
Lys Val Leu Glu Glu Lys Met Asn Ala Glu Gln Gln Leu Gln Ser Thr		
290	295	300
Gln Arg Ser Leu Ala Leu Ala Glu Gln Lys Cys Glu Glu Trp Arg Ser		
305	310	315
Gln Tyr Glu Ala Leu Lys Glu Asp Trp Arg Thr Leu Gly Thr Gln His		
325	330	335
Arg Glu Leu Glu Ser Gln Leu His Val Leu Gln Ser Lys Leu Gln Gly		
340	345	350
Ala Asp Ser Arg Asp Leu Gln Met Asn Gln Ala Leu Arg Phe Leu Glu		
355	360	365

Asn Glu His Gln Glu Leu Gln Ala Lys Ile Glu Cys Leu Gln Gly Asp
 370 375 380
 Arg Asp Leu Cys Ser Leu Asp Thr Gln Asp Leu Gln Asp Gln Leu Lys
 385 390 395 400
 Arg Ser Glu Ala Glu Lys Leu Thr Leu Val Thr Arg Val Gln Gln Leu
 405 410 415
 Gln Gly Leu Leu Gln Asn Gln Ser Leu Gln Leu Gln Glu Gln Glu Lys
 420 425 430
 Leu Leu Thr Lys Asp Gln Ala Leu Pro Val Trp Ser Pro Lys Ser
 435 440 445
 Phe Pro Asn Glu Val Glu Pro Glu Gly Thr Gly Lys Glu Lys Asp Trp
 450 455 460
 Asp Leu Arg Asp Gln Leu Gln Lys Lys Thr Leu Gln Leu Gln Ala Lys
 465 470 475 480
 Glu Lys Glu Cys Arg Glu Leu His Ser Glu Leu Gly Asn Leu Ser Asp
 485 490 495
 Glu Tyr Leu Ser Cys Leu Arg Lys Leu Gln His Cys Arg Glu Glu Leu
 500 505 510
 Asn Gln Ser Gln Gln Leu Pro Pro Arg Arg Gln Cys Gly Arg Trp Leu
 515 520 525
 Pro Val Leu Met Val Val Ile Ala Ala Ala Leu Ala Val Phe Leu Ala
 530 535 540
 Asn Lys Asp Asn Leu Met Ile
 545 550

<210> 3463

<211> 1047

<212> PRT

<213> Homo sapiens

<400> 3463

Met Ala Glu Lys Arg Pro Leu Arg Thr Leu Gly Pro Val Met Tyr Gly
 1 5 10 15

Lys Leu Pro Arg Leu Glu Thr Asp Ser Gly Leu Glu His Ser Leu Pro
 20 25 30

His Ser Val Gly Asn Gln Asp Pro Cys Thr Tyr Lys Gly Ser Tyr Phe
 35 40 45

Ser Cys Pro Met Ala Gly Thr Pro Lys Ala Glu Ser Glu Gln Leu Ala
 50 55 60

Ser Trp Thr Pro Tyr Pro Pro Leu Tyr Ser Thr Gly Met Ala Gly Pro
 65 70 75 80

Pro Leu Gln Ala Asp Asn Leu Leu Thr Asn Cys Leu Phe Tyr Arg Ser
 85 90 95

Pro Ala Glu Gly Pro Glu Lys Met Gln Asp Ser Ser Pro Val Glu Leu
 100 105 110

Leu Pro Phe Ser Pro Gln Ala His Ser Tyr Pro Gly Pro Pro Leu Ala
 115 120 125

Ala Pro Lys Pro Val Tyr Arg Asn Pro Leu Cys Tyr Gly Leu Ser Thr
 130 135 140

Cys Leu Gly Glu Gly Ala Val Lys Arg Pro Leu Asp Val Asp Trp Thr
 145 150 155 160

Leu Ala Thr Gly Pro Leu Leu Pro Ser Ala Asp Pro Pro Cys Ser Leu
 165 170 175

Ala Pro Ala Pro Ser Lys Gly Gln Thr Leu Asp Gly Thr Phe Leu Arg
 180 185 190

Gly Val Pro Ala Glu Gly Ser Ser Lys Asp Ser Ser Gly Ser Phe Ser
 195 200 205

Pro Cys Gln Pro Phe Leu Glu Tyr Gln Thr Ile His Ser Thr Gly
 210 215 220
 Phe Leu Ala Ser Arg Tyr Thr Gly Pro Tyr Pro Arg Asn Ser Lys Gln
 225 230 235 240
 Ala Met Ser Glu Gly Pro Ser Ser Pro Trp Thr Gln Leu Ala Gln Pro
 245 250 255
 Leu Gly Pro Pro Cys Gln Asp Thr Gly Pro Thr His Tyr Pro Pro Pro
 260 265 270
 His His Pro Pro Pro His Pro Pro Gln Ala Leu Pro Cys Pro Pro Ala
 275 280 285
 Cys Arg His Pro Glu Lys Gln Gly Ser Tyr Ser Pro Ala Leu Pro Leu
 290 295 300
 Gln Pro Leu Gly Gly His Lys Gly Thr Gly Tyr Gln Ala Gly Gly Leu
 305 310 315 320
 Gly Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr Ile Pro
 325 330 335
 Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala
 340 345 350
 Pro Ser Pro Gly Leu Lys Leu Glu Pro Pro Leu Thr Pro Arg Cys Pro
 355 360 365
 Leu Asp Phe Ala Pro Gln Thr Leu Ser Phe Pro Tyr Ala Arg Asp Asp
 370 375 380
 Leu Ser Leu Tyr Gly Ala Ser Pro Gly Leu Gly Gly Thr Pro Pro Ser
 385 390 395 400
 Gln Asn Asn Val Arg Ala Val Pro Gln Pro Gly Ala Phe Gln Arg Ala
 405 410 415
 Cys Gln Pro Leu Pro Ala Ser Gln Pro Cys Ser Glu Pro Val Arg Pro
 420 425 430
 Ala Gln Glu Ala Glu Glu Lys Thr Trp Leu Pro Ser Cys Arg Lys Glu

435	440	445
Lys Leu Gln Pro Arg Leu Ser Glu His Ser Gly Pro Pro Ile Val Ile		
450	455	460
Arg Asp Ser Pro Val Pro Cys Thr Pro Pro Ala Leu Pro Pro Cys Ala		
465	470	475
Arg Glu Cys Gln Ser Leu Pro Gln Lys Glu Asp Ala Arg Pro Pro Ser		
485	490	495
Ser Pro Pro Met Pro Val Ile Asp Asn Val Phe Ser Leu Ala Pro Tyr		
500	505	510
Arg Asp Tyr Leu Asp Val Pro Ala Pro Glu Ala Thr Thr Glu Pro Asp		
515	520	525
Ser Ala Thr Ala Glu Pro Asp Ser Ala Pro Ala Thr Ser Glu Gly Gln		
530	535	540
Asp Lys Gly Cys Arg Gly Thr Leu Pro Ala Gln Glu Gly Pro Ser Gly		
545	550	555
Ser Lys Pro Leu Arg Gly Ser Leu Lys Glu Glu Val Ala Leu Asp Leu		
565	570	575
Ser Val Arg Lys Pro Thr Ala Glu Ala Ser Pro Val Lys Ala Ser Arg		
580	585	590
Ser Val Glu His Ala Lys Pro Thr Ala Ala Met Asp Val Pro Asp Val		
595	600	605
Gly Asn Met Val Ser Asp Leu Pro Gly Leu Lys Lys Ile Asp Thr Glu		
610	615	620
Ala Pro Gly Leu Pro Gly Val Pro Val Thr Thr Asp Ala Met Pro Arg		
625	630	635
Thr Asn Phe His Ser Ser Val Ala Phe Met Phe Arg Lys Phe Lys Ile		
645	650	655
Leu Arg Pro Ala Pro Leu Pro Ala Ala Val Val Pro Ser Thr Pro Thr		
660	665	670

Ser Ala Pro Ala Pro Thr Gln Pro Ala Pro Thr Pro Thr Ser Gly Pro
 675 680 685
 Ile Gly Leu Arg Ile Leu Ala Gln Gln Pro Leu Ser Val Thr Cys Phe
 690 695 700
 Ser Leu Ala Leu Pro Ser Pro Ala Val Ala Val Ala Ser Pro Ala
 705 710 715 720
 Pro Ala Pro Ala Pro Ser Pro Ala Pro Ala Arg Ala Gln Ala Pro Ala
 725 730 735
 Ser Ala Arg Asp Pro Ala Pro Ala Pro Ala Pro Val Ala Gly Pro Ala
 740 745 750
 Pro Ala Ser Thr Ser Ala Pro Gly Asp Ser Leu Glu Gln His Phe Thr
 755 760 765
 Gly Leu His Ala Ser Leu Cys Asp Ala Ile Ser Gly Ser Val Ala His
 770 775 780
 Ser Pro Pro Glu Lys Leu Arg Glu Trp Leu Glu Thr Ala Gly Pro Trp
 785 790 795 800
 Gly Gln Ala Ala Trp Gln Asp Cys Gln Gly Val Gln Gly Leu Leu Ala
 805 810 815
 Lys Leu Leu Ser Gln Leu Gln Arg Phe Asp Arg Thr His Arg Cys Pro
 820 825 830
 Phe Pro His Val Val Arg Ala Gly Ala Ile Phe Val Pro Ile His Leu
 835 840 845
 Val Lys Glu Arg Leu Phe Pro Arg Leu Pro Pro Ala Ser Val Asp His
 850 855 860
 Val Leu Gln Glu His Arg Val Glu Leu Arg Pro Thr Thr Leu Ser Glu
 865 870 875 880
 Glu Arg Ala Leu Arg Glu Leu Ala Leu Pro Gly Cys Thr Ser Arg Met
 885 890 895
 Leu Lys Leu Leu Ala Leu Arg Gln Leu Pro Asp Ile Tyr Pro Asp Leu

900	905	910
Leu Gly Leu Gln Trp Arg Asp Cys Val Arg Arg Gln Leu Gly Asp Phe		
915	920	925
Asp Thr Glu Ala Gly Ala Val Ser Ser Ser Glu Pro Thr Val Ala Arg		
930	935	940
Asp Glu Pro Glu Ser Leu Ala Leu Ala Gln Lys Ser Pro Ala Pro Lys		
945	950	955
Val Arg Lys Pro Gly Arg Lys Pro Pro Thr Pro Gly Pro Glu Lys Ala		
965	970	975
Glu Ala Ala Ala Gly Glu Glu Ser Cys Gly Ala Ser Pro Thr Pro Ala		
980	985	990
Thr Ser Ala Ser Pro Pro Gly Pro Thr Leu Lys Ala Arg Phe Arg Ser		
995	1000	1005
Leu Leu Glu Thr Ala Trp Leu Asn Gly Leu Ala Leu Pro Thr Trp Gly		
1010	1015	1020
His Lys Ser Ser Arg Pro Asp Gln Pro Ser Pro Cys Pro Gln Leu Leu		
1025	1030	1035
Asp Ser Gln Ser His His Leu		
1045		

<210> 3464

<211> 358

<212> PRT

<213> Homo sapiens

<400> 3464

Met Gln Arg Ser Pro His Ala Ala Glu Thr Gly Val Pro Thr Gly Ser

1

5

10

15

Ala Lys Val Thr Thr Gln Gln Arg Gln Ala Ser Cys Gly Gln Cys
 20 25 30
 Arg Gly His His Ala Ala Glu Thr Gly Val Leu Trp Ala Val Gln
 35 40 45
 Arg Ser Pro Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu
 50 55 60
 Val Thr Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val
 65 70 75 80
 Thr Thr Thr Gln Gln Arg Arg Ala Ser Pro Gln Ala Val Gln Arg Ser
 85 90 95
 Pro Pro Arg Ser Arg Asp Arg Arg Pro His Gly Gln Cys Lys Gly His
 100 105 110
 His His Thr Ala Glu Ile Gly Val Leu Trp Ala Met Gln Arg Ser Pro
 115 120 125
 Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val Thr Pro
 130 135 140
 Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val Thr Thr Thr
 145 150 155 160
 Gln Gln Arg Arg Ala Ser Pro Gln Ala Val Gln Arg Ser Pro Pro His
 165 170 175
 Ser Arg Asp Arg Arg Pro His Gly Gln Cys Arg Gly His His Ala
 180 185 190
 Ala Glu Thr Gly Val Pro Thr Gly Ser Ala Glu Val Thr Thr Thr Gln
 195 200 205
 Gln Arg Gln Ala Ser Cys Gly Gln Cys Arg Gly His His Ala Ala
 210 215 220
 Glu Thr Gly Val Leu Trp Ala Val Gln Arg Ser Pro Pro Arg Ser Arg
 225 230 235 240
 Asp Gly Arg Pro His Arg Gln Cys Arg Gly His His His Thr Ala Glu

245	250	255
Thr Gly Val Leu Trp Ala Val Gln Arg Ser Pro Pro Arg Ser Arg Asp		
260	265	270
Arg Arg Pro Val Gly Ser Ala Glu Val Thr Thr Leu Ser Gln Thr Val		
275	280	285
Leu Gly Leu Pro Trp Val Glu His Arg Met Lys Thr Met Cys Phe Glu		
290	295	300
Pro Trp Lys Asp Asn Gln Pro Ser Gln Ser Gln Ser Leu Lys Gln Ala		
305	310	315
Ala Pro Arg Ala Gln Leu Gln Glu Ala Ala Ser Ser Arg Gly Leu Gln		
325	330	335
Gln Gly Gly Arg Cys Val Pro Ser Val Ala Ser Trp Cys Pro Leu		
340	345	350
Met Ser Arg Ser Val Arg		
355		

<210> 3465

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3465

Met Ser Arg Ser Val Leu Glu Ala Leu Thr Ser Ser Thr Ala Met Gln			
1	5	10	15
Cys Val Pro Ser Asp Gly Cys Ala Met Leu Leu Arg Val Arg Ala Ser			
20	25	30	
Ile Thr Leu His Glu Arg Leu Arg Gly Leu Glu Ala Cys Ala Met Ser			
35	40	45	

Leu Asp Thr Gln Glu Thr Gln Cys Gln Ser Val Trp Val Ala Arg Ala
 50 55 60
 Ser His Arg Gln Gln Arg Gly Arg Gln Leu Gln Val His Phe Gly Cys
 65 70 75 80
 Phe Ala Val Ser Val Ala Gln His Leu Tyr Val Thr Leu Arg Thr Ile
 85 90 95
 Pro His Phe Cys Gly Val Gln Leu Asp Gln Arg His Leu Val Glu Ala
 100 105 110
 Gly Lys Leu Ser Tyr Trp Val Asp Arg Arg Arg Lys Ala Ile Leu Val
 115 120 125
 Gln Val Pro Arg Ala Ser Gly Ser Pro Asp Tyr Tyr Leu Arg Leu Cys
 130 135 140
 Leu Lys Arg Phe Thr Cys Glu Asp Ala Gly Ala Pro Val Arg Val Thr
 145 150 155 160
 Ala Asn Ser Val Pro Gln Ala Val Phe Leu Pro Tyr Ser Gln Glu Leu
 165 170 175
 Pro Cys Leu Cys Leu Glu Gly Trp Ser Ala Thr Pro Asp Ala Val Arg
 180 185 190
 Ile Gln Ile Cys Pro Phe Glu Asn Asp Thr Glu Ala Leu Glu Val Leu
 195 200 205
 Trp Asp Thr Val Tyr Tyr His Pro Glu Ser Gln Thr Leu Ser Trp Glu
 210 215 220
 Pro Ala Cys Pro Val Ser Gly His Val Ser Leu Cys Trp Arg Pro Gly
 225 230 235 240
 Pro Gly Ala Gly Cys Arg Lys Leu Gln Gln Ser Ser Gln Leu Val His
 245 250 255
 Arg Arg Val Gln Tyr Pro Leu Val Asp Thr Gln Pro Gln Leu Cys Leu
 260 265 270
 Lys Phe Ser Thr Ser Trp Gly Ser Trp Val Arg Cys Pro Phe Glu Gln

275	280	285
Arg Arg Phe Pro Thr Pro Pro Thr Ser Arg Cys Thr Cys Val Thr Gly		
290	295	300
Gly Ser His Ser Ser Leu Pro Ala Asn Ala His Ser Arg Pro Ala Arg		
305	310	315
Ser Leu Gln Pro Gln Val Thr Trp Gln Pro Pro Leu Leu Leu Pro Ser		
325	330	335

<210> 3466

<211> 295

<212> PRT

<213> Homo sapiens

<400> 3466

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Ser Gly Ala

1	5	10	15
---	---	----	----

Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe

20	25	30
----	----	----

Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala

35	40	45
----	----	----

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala

50	55	60
----	----	----

Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly

65	70	75	80
----	----	----	----

Pro Glu Tyr Trp Asp Arg Asn Thr Arg Asn Val Lys Ala His Ser Gln

85	90	95
----	----	----

Thr Asp Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr

100	105	110
-----	-----	-----

Asp Ala Pro Lys Thr His Met Thr His His Ala Val Ser Asp His Glu
 115 120 125
 Ala Thr Leu Arg Cys Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr
 130 135 140
 Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu
 145 150 155 160
 Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ser
 165 170 175
 Val Val Val Pro Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln
 180 185 190
 His Glu Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser
 195 200 205
 Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly Leu Val Leu Phe
 210 215 220
 Gly Ala Val Ile Ala Gly Ala Val Val Ala Ala Val Met Trp Arg Arg
 225 230 235 240
 Lys Ser Ser Gly Gly Glu Gly Met Lys Gly Gly Ser Glu Ile Ser Cys
 245 250 255
 Leu Thr Glu Gly Ser Lys Thr Gln Val Glu Val Cys Pro Ala Ser Leu
 260 265 270
 Leu Gly Ser Thr Ile His Asn Tyr Glu Pro Thr Gln Pro Gly Pro Cys
 275 280 285
 Val Pro Ala Leu Thr Leu Leu
 290 295

<210> 3467

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3467

Met Glu Gly Leu Val Phe Leu Asn Ala Leu Ala Thr Arg Leu Leu Phe
 1 5 10 15
 Leu Leu His Ser Leu Val Gly Val Trp Arg Val Thr Glu Val Lys Lys
 20 25 30
 Glu Pro Arg Tyr Trp Leu Leu Ala Leu Leu Asn Leu Leu Phe Leu
 35 40 45
 Glu Thr Ala Leu Thr Leu Lys Phe Lys Arg Gly Arg Gly Tyr Lys Trp
 50 55 60
 Phe Ser Pro Ala Ile Phe Leu Tyr Leu Ile Ser Ile Val Pro Ser Leu
 65 70 75 80
 Trp Leu Leu Glu Leu His His Glu Thr Gln Tyr Cys Ser Ile Gln Ala
 85 90 95
 Glu Gly Thr Ser Gln Asn Thr Ser Arg Lys Glu Asp Phe Asn Gln Thr
 100 105 110
 Leu Thr Ser Asn Glu Gln Thr Ser Arg Ala Asp Asp Leu Ile Glu Thr
 115 120 125
 Ala Lys Val Phe Val Asn Asn Leu Ser Thr Val Cys Glu Lys Val Trp
 130 135 140
 Thr Leu Gly Leu His Gln Thr Phe Leu Leu Met Leu Ile Ile Gly Arg
 145 150 155 160
 Trp Leu Leu Pro Ile Gly Gly Ile Thr Arg Asp Gln Leu Ser Gln
 165 170 175
 Leu Leu Leu Met Phe Val Gly Thr Ala Ala Asp Ile Leu Glu Phe Thr
 180 185 190
 Ser Glu Thr Leu Glu Glu Gln Asn Val Arg Asn Ser Pro Ala Leu Val
 195 200 205

Tyr Ala Ile Leu Val Ile Trp Thr Trp Ser Met Leu Gln Phe Pro Leu
 210 215 220
 Asp Leu Ala Val Gln Asn Val Val Cys Pro Val Ser Val Thr Glu Arg
 225 230 235 240
 Gly Phe Pro Ser Leu Phe Phe Cys Gln Tyr Ser Ala Asp Leu Trp Asn
 245 250 255
 Ile Gly Ile Ser Val Phe Ile Gln Asp Gly Pro Phe Leu Val Val Arg
 260 265 270
 Leu Ile Leu Met Thr Tyr Phe Lys Val Ile Asn Gln Met Leu Val Phe
 275 280 285
 Phe Ala Ala Lys Asn Phe Leu Val Val Val Leu Gln Leu Tyr Arg Leu
 290 295 300
 Val Val Leu Ala Leu Ala Val Arg Ala Ser Leu Arg Ser Gln Ser Glu
 305 310 315 320
 Gly Leu Lys Gly Glu His Gly Cys Arg Ala Gln Thr Ser Glu Ser Gly
 325 330 335
 Pro Ser Gln Arg Asp Trp Gln Asn Glu Ser Lys Glu Gly Leu Ala Ile
 340 345 350
 Pro Leu Arg Gly Ser Pro Val Thr Ser Asp Asp Ser His His Thr Pro
 355 360 365

<210> 3468

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3468

Met Gly Val Pro Asn Phe Leu Ser Phe Phe Ser Phe Leu Phe Phe

1	5	10	15
Phe Lys Ser Leu Arg Gln Gly Leu Ala Gln Leu Pro Arg Leu Glu Cys			
20	25	30	
Ser Gly Thr Ile Ser Ala His Cys Ser Leu Asn Leu Leu Gly Ser Ser			
35	40	45	
Asp Pro Pro Thr Leu Ala Ser Ser Ile Ser Gly Thr Ala Gly Thr His			
50	55	60	
His His Ala Gln Leu Ile Phe Phe Phe Phe Leu Arg Gln Gly Leu			
65	70	75	80
Thr Leu Ser Pro Thr Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys			
85	90	95	
Asn Leu Cys Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln			
100	105	110	
Val Ala Gly Asn Thr Gly Val His His His Thr Arg Leu Ile Phe Val			
115	120	125	
Phe Leu Leu Glu Thr Arg Phe Cys His Val Gly Gln Thr Gly Leu Lys			
130	135	140	
Leu Leu Ile Ser Gly Asp Gln Pro Thr Leu Ala Ser Gln Ser Ala Gly			
145	150	155	160
Ile Thr Gly Met Ser Cys Arg Ala Gln Pro Cys Phe Pro Tyr His Leu			
165	170	175	
Ser Arg Ala Pro Cys Val Arg Gly Leu Gly Pro Leu Ser His His Lys			
180	185	190	
Leu Gln Arg Gly Ser Ala Ala Thr			
195	200		

<210> 3469

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3469

Met Ile Gln Leu Pro Pro Thr Arg Ser Leu Ser Gln His Leu Gly Ile

1 5 10 15

Gln Gly Glu Ile Trp Val Gly Thr Gln Pro Asn His Ile Thr Ala Pro

20 25 30

Glu Leu Asn Phe Ser Trp Asn Cys Ser Ser Tyr Glu Gly Glu Phe Ser

35 40 45

Ile Val Pro Thr Ser Gln Leu Ser Ser Gly His Asp Val Ser Asn Trp

50 55 60

His Gly Leu Gly Gln Ala Leu Cys Thr Ser Cys Asn Gly Val Leu Glu

65 70 75 80

Arg Ile His Leu His Phe Gln Leu Leu His Trp Gln Val Gly Val Ser

85 90 95

Pro Asp Ile Arg Lys Gly Leu Asn Ala Gly Gln Ser Lys Lys Asn Asp

100 105 110

Thr Cys Pro Phe Leu Leu Glu His Asp Gly Cys Glu Glu Asp Arg Arg

115 120 125

<210> 3470

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3470

Met Val Glu Leu Thr Val Ala Ala Arg Gln Ala Tyr Lys Thr Met Leu

1	5	10	15
Glu Asn Val Gln Gln Glu Leu Val Gly Glu Pro Arg Pro Gln Ala Pro			
20	25	30	
Pro Ser Leu Pro Met Gly Val Val Ala Ala Thr Leu Glu Val Val Gly			
35	40	45	
Thr Arg Ala Met Gly Val Ala Gly Ile Met Thr Val Asp Leu Glu Gly			
50	55	60	
Met Asp Met Asp Met Asp Val Pro Glu Thr Ile Met Ala Glu Thr Arg			
65	70	75	80
Val Val Met Thr Ala Thr Gln Glu Glu Ile Thr Glu Thr Ile Met Thr			
85	90	95	
Thr Glu Met Arg His Ala His Asn Ile Asp Thr Gln Gly Ile Ile Ser			
100	105	110	
Asp Pro Gly Ser Ser Phe Gln Met Ala Val Phe Ile Lys Val Phe Gly			
115	120	125	
Ala Ala Leu Lys His Leu Ile Leu			
130	135		

<210> 3471

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3471

1	5	10	15
Met Gly Ile Ser Arg Thr Ala Pro Gln Gly Thr Gly Gly Ile Ile Leu			
20	25	30	
Gln Gly Pro Leu Leu Pro Met Lys Asp Thr Arg Glu Met Leu Leu Arg			

Lys Leu Glu Leu Cys Ala Phe Asp His Leu Val Cys Pro Pro Ile Leu
 35 40 45
 Pro Ser Glu Gly Leu Gly Glu Arg Arg Asn Ala Pro Ser Glu Gly Leu
 50 55 60
 Gly Glu Arg Arg Asn Ala Arg Gly Arg Cys Ala Leu Gln Arg Leu Tyr
 65 70 75 80
 Gln His Gln Lys Lys Ala Gly Arg Val Phe Leu Glu Glu Gly Arg
 85 90 95
 Arg Pro Ala Val Ala Gly Arg Leu Ala Gly Gln Glu Arg Pro Ile Ser
 100 105 110
 Ala Val Leu Ser Ser Gly Leu Gln His Pro Thr Trp Arg Thr Pro Leu
 115 120 125
 Pro Leu Ser Ser Thr Val Ala Leu Leu Ser Trp Cys Pro Leu Asn Ala
 130 135 140
 Tyr Leu Pro Phe Val Pro Pro Asn Leu Ser Arg Pro Pro Gln Val Thr
 145 150 155 160
 His Phe Leu Ser Cys Ser Glu Leu
 165

<210> 3472

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3472

Met Gly Trp Lys Lys Ile Gln Glu Ser Ser Ala Gln Ile Trp Trp Leu
 1 5 10 15
 Lys Glu Glu Gln Trp Pro Gln Glu Val Val Glu Gln Glu Gly Pro Arg

20	25	30
Ile Glu Pro Arg Arg Thr Met Val Phe Lys Gly Pro Ala Lys Glu Thr		
35	40	45
Ser Arg Arg Lys Val Lys Ser Val Val Ser Gln Lys Ser Arg Glu Lys		
50	55	60
Val Ser Arg Asn Ser Gln Gln Cys Glu Ile Leu Leu Cys Lys Ser Ile		
65	70	75
Met Val Arg Ala Arg Lys Asp Pro Leu Asp Thr Thr Arg Trp Trp Ser		80
85	90	95
Gly Ile Val Pro Arg Thr Ala Ser Met Val Cys Trp Ser Ser Gln Leu		
100	105	110
Pro Val Gly Leu Arg Ser Lys Gln Gly Arg Val Gln Arg Gly Arg Leu		
115	120	125
Glu Arg Val Ala Ala Gly Gly Cys Cys Phe Leu Gly Ser His Pro		
130	135	140
His Ala Pro Thr Gly Cys His Ser Ala Trp Phe Pro Cys Leu Ala Pro		
145	150	155
Leu Leu Pro Leu Pro Ser Ser Gly Leu Gln Asp Gly Leu Asp Ser Gly		160
165	170	175
Leu Ser Gly Tyr Ile Asp Leu Asn Lys Ser Pro Lys Phe		
180	185	

<210> 3473

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3473

Met Pro Arg Gly Leu Ala Asp Lys Gln Gly Pro Glu Glu Cys Asp Ala
 1 5 10 15

Val Ala Leu Leu Ser Leu Ile Asn Ser Cys Asp His Phe Val Val Asp
 20 25 30

Arg Lys Lys Val Thr Glu Val Ile Lys Cys Arg Asn Glu Ile Met His
 35 40 45

Ser Ser Glu Met Lys Val Ser Ser Thr Trp Leu Arg Asp Phe Gln Met
 50 55 60

Lys Ile Gln Asn Phe Leu Asn Glu Phe Lys Asn Ile Pro Glu Ile Val
 65 70 75 80

Ala Val Tyr Ser Arg Ile Glu Gln Leu Leu Thr Ser Asp Trp Ala Val
 85 90 95

His Ile Pro Glu Glu Asp Gln Arg Asp Gly Cys Glu Cys Glu Met Gly
 100 105 110

Thr Tyr Leu Ser Glu Ser Gln Val Asn Glu Ile Glu Met Gln Leu Leu
 115 120 125

Lys Glu Lys Leu Gln Glu Ile Tyr Leu Gln Ala Glu Glu Gln Glu Val
 130 135 140

Leu Pro Glu Glu Leu Ser Asn Arg Leu Glu Val Val Lys Glu Phe Leu
 145 150 155 160

Arg Asn Asn Glu Asp Leu Arg Asn Gly Leu Thr Glu Asp Met Gln Lys
 165 170 175

Leu Asp Ser Leu Cys Leu His Gln Lys Leu Asp Ser Gln Glu Pro Gly
 180 185 190

Arg Gln Thr Pro Asp Arg Lys Ala
 195 200

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3474

Met Asp Gly Arg Ala Ala Gly Gly Arg Gly Gly Phe Leu Arg Arg

1

5

10

15

Glu Val Gly Ser Leu Gln Pro Pro Ser His Cys Pro His Pro Thr Val

20

25

30

Trp Leu Leu Pro Gly Leu Ser Phe Pro Ile Cys Glu Thr Gly Glu Met

35

40

45

Gly Ser Leu Ser Gly Pro Arg Ser Ile Leu Met Gly Val Arg Ala Trp

50

55

60

Gln Gly Leu Cys Arg Leu Gly Ser Glu Leu Gly Arg Pro Gly Cys Val

65

70

75

80

Ala Thr Gly Val Ser Ala Pro Thr Ser Pro Phe Glu Thr Cys Pro Ala

85

90

95

Phe Leu Phe Ala Ala Ala Thr Ala Val Arg Phe Ala Thr Arg Ser Cys

100

105

110

Gly Cys Pro Pro Arg Gln Gly Asp

115

120

<210> 3475

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3475

Met Glu Pro Leu Asn Ser Ala Val Phe Asn Leu Arg Glu Asp Arg Val
 1 5 10 15
 Gly Gln Phe Ser Trp Gln Gln Leu Arg Glu Gly Glu Ser Arg Glu Gln
 20 25 30
 Gly Ser Asp Lys Val Cys Leu Ala Gly Ser Lys His Phe Met Glu Trp
 35 40 45
 Arg Pro Leu Ala Val Arg Asp Leu Arg Lys Ile Cys Gln Gly Leu Leu
 50 55 60
 His Ser Glu Gly Leu Gln Phe Gly Trp Leu Gly Thr Leu Leu Pro Cys
 65 70 75 80
 Thr Asp Gly Ala Pro Ile Ser Met Thr Arg Val Leu Val Gln Thr Gln
 85 90 95
 Phe Ile Val Phe Thr Asn Ser Met His Ser Asn Gln Thr Glu Ile Glu
 100 105 110
 Ile Gln Tyr Asn Ile Lys Gly Asp Leu Gly Gln Ala Gln Trp Leu Ile
 115 120 125
 Leu Val Ile Pro Ala Leu Trp Asp Ala Glu Leu Gly Gly Ser Leu Glu
 130 135 140
 Ala Arg Ser Leu Gly Pro Ala Trp Ala Arg Lys
 145 150 155

<210> 3476

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3476

Met Ile Ser Val His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser

1	5	10	15
Pro Ala Leu Ala Ser Gln Ile Ala Gly Ile Thr Gly Met His His His			
20	25	30	
Ala Arg Gln Ile Phe Ile Phe Leu Ile Glu Thr Gly Phe His His Val			
35	40	45	
Asp Gln Ala Gly Leu Lys Leu Leu Ala Ser Ser Tyr Leu Pro Ala Leu			
50	55	60	
Ala Ser Gln Ser Phe Gly Ile Thr Gly Val Ser His Arg Ala Trp Pro			
65	70	75	80
Pro Leu Asn Thr Leu Lys Met Ser Gln Cys Ile Leu Val Ser Ile Phe			
85	90	95	
Tyr Ile Gly Lys Phe Val Val Asn Leu Ile Leu Ile Pro Val His Leu			
100	105	110	
Val			

<210> 3477

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3477

1	5	10	15
Met Leu Met Val Leu Phe Lys Tyr Trp Phe Val Ser Phe Gly Asp Val			
20	25	30	
Leu Val Phe Gln Gly Tyr Asp Cys Pro Asp Asn Gly Ser Ser Met Glu			
35	40	45	
Phe Leu Leu Ile Gly Ser Leu Pro Ser Thr Leu Ile Lys Ser Ile Phe			

Cys Leu Phe Val Leu Arg Gln Ser Phe Ala Leu Val Ala Gln Ala Gly
 50 55 60
 Val Arg Trp Cys Asp Leu Gly Ser Ala Gln Pro Leu Pro Pro Gly Phe
 65 70 75 80
 Lys Leu Val Ser Cys Leu Gly Leu Pro Ser Ser Trp Asp Tyr Arg His
 85 90 95
 Ala Pro Pro Arg Leu Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe
 100 105 110
 Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr
 115 120

<210> 3478

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3478

Met Trp Trp Pro Leu Ala Gly Met Thr Asp Ser Glu Val Ile Thr His
 1 5 10 15
 Ser His Cys Asn Cys His Ser Val Ala Ser Phe Ser Gln Gly Gln Gly
 20 25 30
 Pro Gly Glu Arg Thr Gly Trp Gln Pro Ala Ala Gln Leu Glu Met Arg
 35 40 45
 Ser Leu Ser Phe Ser Ser Tyr Leu Met Glu Ala Ser Gln Met Gln Asp
 50 55 60
 Gly Ser Ser Arg Pro Ser Ile Thr Ser Ser Gln Cys Pro Lys Ala Arg
 65 70 75 80
 Arg Glu Ala Val Val Phe Lys Ser Arg Lys Thr Phe Leu Asn Leu Ala

85

90

95

Arg Ile Ala Ser Gln Thr Leu Ser

100

<210> 3479

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3479

Met Glu Ala Gln Ser Cys Glu Gln Glu Thr Thr Ala Arg Arg Asn Gly

1

5

10

15

Gly Ala Arg Ser Leu Lys Gly Asn Ala Ala Gly Gly Val Val Lys Asp

20

25

30

Asn Ile Cys Phe Gly Ala Thr Ser Gly Ala Val Thr Lys Lys Pro Ser

35

40

45

Thr Leu Arg Lys Lys Glu Lys Phe Gly Tyr Arg Glu Thr Pro Cys Ser

50

55

60

Lys Cys Cys Asp Ser Lys Thr Ala Gly Phe Ala Pro Leu Ala Lys Glu

65

70

75

80

Pro Thr Glu Thr Pro Gly Ala Ala Thr Ala Lys Pro Ala Leu Glu Gly

85

90

95

Leu Gly Trp Arg Lys Pro Arg Thr Glu Thr Arg Lys Leu Cys Thr Ala

100

105

110

Arg Leu Ala Val Asp Thr Asn Arg Lys Val Ser Arg Leu Leu Ser Gly

115

120

125

Arg Lys Arg Gly Ser Lys Pro Ala Thr Gln Trp Arg Glu Pro Arg Ser

130

135

140

His

145

<210> 3480

<211> 240

<212> PRT

<213> Homo sapiens

<400> 3480

Met Gly Leu His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly

1 5 10 15

Ile Ser Asp Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val

20 25 30

Pro Gly Tyr Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr

35 40 45

Ile Phe Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser

50 55 60

His Leu Lys Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val

65 70 75 80

His Gln Glu Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser

85 90 95

Gly Ser Leu Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val

100 105 110

Val Leu Lys Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln

115 120 125

Gln His Arg Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr

130 135 140

Leu Val Asn Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg

145	150	155	160
Leu Ala Val Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val			
165	170	175	
Arg Arg Phe Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu			
180	185	190	
Gly Asn Val Ala Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly			
195	200	205	
Arg Ala Ser Trp Leu Tyr Lys Glu Ser Gln Phe Gly Thr Pro Arg Gly			
210	215	220	
Thr Val Trp Pro His Leu Gln Val Ser Gln Gly Cys Trp Trp Pro Arg			
225	230	235	240

<210> 3481

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3481

1	5	10	15
Met Leu Leu Thr Thr Leu Thr His Phe Phe Phe Phe Phe Leu			
20	25	30	
Arg Gln Ser Leu Thr Leu Ser Ala Trp Leu Glu Cys Ser Gly Thr Ile			
35	40	45	
Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asn Ser Pro Ala			
50	55	60	
Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys His His Ala Arg			
65	70	75	80
Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His His Val Gly Glu			

Ala Gly Leu Glu Leu Leu Thr Ser Gly Asn Pro Pro Ala Ser
 85 90 95
 Gln Ser Ala Gly Ile Thr Ser Val Ser His Arg Ala Arg Pro Thr Val
 100 105 110
 Phe Lys Ser Val Glu Thr Ser Phe Pro Leu Met Pro Cys Ser Arg Ala
 115 120 125
 Asp Tyr Asn Ser His His Ala Trp Gln Pro Leu Gly Pro Arg Phe Arg
 130 135 140
 Thr Ser Leu Thr Arg Phe Thr Ser Pro Gly Ile Leu Arg Cys Phe Pro
 145 150 155 160
 Asn Ser Pro Ala

<210> 3482

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3482

Met Pro Val Cys Pro Cys Leu His Leu Phe Phe Ser Phe Phe Phe
 1 5 10 15
 Cys Phe Leu Arg Trp Ser Phe Ala Leu Ser Pro Arg Leu Glu Cys Ser
 20 25 30
 Gly Ala Ile Leu Ala Arg Cys Ser Leu His Leu Pro Gly Ser Ser Asp
 35 40 45
 Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys Tyr
 50 55 60
 His Thr Trp Leu Ile Leu Val Phe Leu Ile Glu Thr Gly Phe His His

65	70	75	80
Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Pro Ala			
85	90	95	
Leu Ala Ser Gln Ser Val Gly Ile Thr Gly Leu Ser His Pro Ala Arg			
100	105	110	
Pro Asn Ala Ser Ile Leu Phe Leu Asp Ala Phe His Ser Lys Trp			
115	120	125	

<210> 3483

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3483

Met Ser His Val Ile Trp Thr Leu Lys Met Glu Cys Ser Glu Thr His

1	5	10	15
---	---	----	----

Val Gln Gly Ser Cys Ala Lys Leu Met Ser Arg Thr Gly Leu Leu Met

20	25	30
----	----	----

Lys Leu Leu Ser Glu Gln Gln Glu Ala Lys Ala Leu Asn Val Glu Trp

35	40	45
----	----	----

Asp Thr Asp Gln Gln Lys Thr Asn Tyr Ile Asn Glu Asn Met Glu Gln

50	55	60
----	----	----

Asn Glu Gln Lys Glu Gln Lys Ser Ser Glu Leu Met Lys Glu Val Pro

65	70	75	80
----	----	----	----

Gly Tyr Asp Tyr Lys Asn Lys Leu Ile Phe Ala Ile Ser Val Thr Val

85	90	95
----	----	----

Ile Leu Ile Ile Leu Ile Ile Ile Phe Cys Phe Ile Glu Val Lys Thr

100	105	110
-----	-----	-----

Ile Ile Asn Ser Gly Phe Gln Asn Thr Ile Leu Cys Leu Cys Gly Phe
 115 120 125
 Arg Ile His Lys Leu Lys Thr Asn Val Thr Phe Pro Leu Asp Ile Leu
 130 135 140
 Leu Leu Ser Phe Lys Ala Glu Val Cys Phe Val Leu Leu Leu Gln Cys
 145 150 155 160
 Ile Phe Gln Asp Cys
 165

<210> 3484

<211> 405

<212> PRT

<213> Homo sapiens

<400> 3484

Met Ser Ser Ser Val Lys Thr Pro Ala Leu Glu Glu Leu Val Pro Gly

1 5 10 15

Ser Glu Glu Lys Pro Lys Gly Arg Ser Pro Leu Ser Trp Gly Ser Leu

20 25 30

Phe Gly His Arg Ser Glu Lys Ile Val Phe Ala Lys Ser Asp Gly Gly

35 40 45

Thr Asp Glu Asn Val Leu Thr Val Thr Ile Thr Glu Thr Thr Val Ile

50 55 60

Glu Ser Asp Leu Gly Val Trp Ser Ser Arg Ala Leu Leu Tyr Leu Thr

65 70 75 80

Leu Trp Phe Phe Ser Phe Cys Thr Leu Phe Leu Asn Lys Tyr Ile

85 90 95

Leu Ser Leu Leu Gly Gly Glu Pro Ser Met Leu Gly Ala Val Gln Met

100	105	110
Leu Ser Thr Thr Val Ile Gly Cys Val Lys Thr Leu Val Pro Cys Cys		
115	120	125
Leu Tyr Gln His Lys Ala Arg Leu Ser Tyr Pro Pro Asn Phe Leu Met		
130	135	140
Thr Met Leu Phe Val Gly Leu Met Arg Phe Ala Thr Val Val Leu Gly		
145	150	155
Leu Val Ser Leu Lys Asn Val Ala Val Ser Phe Ala Glu Thr Val Lys		
165	170	175
Ser Ser Ala Pro Ile Phe Thr Val Ile Met Ser Arg Met Ile Leu Gly		
180	185	190
Glu Tyr Thr Gly Leu Leu Val Asn Leu Ser Leu Ile Pro Val Met Gly		
195	200	205
Gly Leu Ala Leu Cys Thr Ala Thr Glu Ile Ser Phe Asn Val Leu Gly		
210	215	220
Phe Ser Ala Ala Leu Ser Thr Asn Ile Met Asp Cys Leu Gln Asn Val		
225	230	235
Phe Ser Lys Lys Leu Leu Ser Gly Asp Lys Tyr Arg Phe Ser Ala Pro		
245	250	255
Glu Leu Gln Phe Tyr Thr Ser Ala Ala Val Ala Met Leu Val Pro		
260	265	270
Ala Arg Val Phe Phe Thr Asp Val Pro Val Ile Gly Arg Ser Gly Lys		
275	280	285
Ser Phe Ser Tyr Asn Gln Asp Val Val Leu Leu Leu Thr Asp Gly		
290	295	300
Val Leu Phe His Leu Gln Ser Ile Thr Ala Tyr Ala Leu Met Gly Lys		
305	310	315
Ile Ser Pro Val Thr Phe Ser Val Ala Ser Thr Val Lys His Ala Leu		
325	330	335

Ser Ile Trp Leu Ser Val Ile Val Phe Gly Asn Lys Ile Thr Ser Leu
 340 345 350
 Ser Ala Val Gly Thr Ala Leu Val Thr Val Gly Val Leu Leu Tyr Asn
 355 360 365
 Lys Ala Arg Gln His Gln Gln Glu Ala Leu Gln Ser Leu Ala Ala Ala
 370 375 380
 Thr Gly Arg Ala Pro Asp Asp Thr Val Glu Pro Leu Leu Pro Arg Asp
 385 390 395 400
 Pro Arg Gln His Pro
 405

<210> 3485

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3485

Met Lys Ser Val Ala Gln Leu Val Tyr Phe Phe Gly Leu Leu Leu Leu
 1 5 10 15
 Asn Phe Val Ser Pro Lys Ser Glu Tyr Glu Ser Phe Cys Val Leu Ser
 20 25 30
 Leu Leu Leu Phe Phe Arg Glu Val Lys Val Val Gly Val Gln Pro Ile
 35 40 45
 Phe Val Tyr Phe Phe Cys Ser Ser Tyr Ile Tyr Tyr Tyr Trp Trp Phe
 50 55 60
 Leu Ser Gly Asn Phe Ser Phe Thr Leu Thr Leu Ala Leu Pro Pro Ser
 65 70 75 80
 Ala Phe Phe Ser Trp Leu Gln Leu Ser Thr Ile Ile Cys Gly Phe Pro

85	90	95
----	----	----

Glu Gly Glu Pro Trp Trp Ser Gly Gly Gly Arg Pro His Ser Lys

100	105	110
-----	-----	-----

Ser Gly Val Val Gly Val Pro Asp Arg Val Leu Ile Gln Glu

115	120	125
-----	-----	-----

<210> 3486

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3486

Met Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Leu Phe Ser

1	5	10	15
---	---	----	----

Val Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Glu Leu Phe Pro

20	25	30
----	----	----

Val Leu Phe Pro Met Leu Phe Pro Ala Leu Leu Pro Ala Leu Phe His

35	40	45
----	----	----

Met Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Leu Phe Ser

50	55	60
----	----	----

Ala Pro Phe Pro Met Arg Ser Leu His Cys Ser Pro Arg Cys Ser Pro

65	70	75	80
----	----	----	----

Cys Cys Ser Pro Arg Cys Ser Pro Cys Cys Ser Leu His Cys Ser Pro

85	90	95
----	----	----

Cys Cys Ser Leu Gln Cys Ser Leu His Cys Ser Pro His Cys Ser Leu

100	105	110
-----	-----	-----

His Cys Ser Pro Cys Cys Phe Leu His Tyr Ser Pro Cys Cys Ser Leu

115	120	125
-----	-----	-----

His Phe Ser Leu Cys Arg Ser Pro Cys Ile Pro Cys Thr Val Pro Cys
 130 135 140
 Thr Val Pro His Ala Val Pro Cys Asn Ala Pro Cys Thr Val Pro Arg
 145 150 155 160
 Thr Ala Pro Cys Thr Ile Pro His Ala Val Pro Cys Thr Phe Leu Cys
 165 170 175
 Ala Val Pro His Ala Phe Pro Ala Leu Phe Pro Ala Leu Phe Pro Met
 180 185 190
 Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Pro Phe Pro Met
 195 200 205
 Leu Phe Pro Ala Gly Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala
 210 215 220
 Pro Phe Pro Met Leu Phe Pro Ala Gly Phe Pro Ala Leu Phe Pro Met
 225 230 235 240
 Leu Phe Pro Ala His Phe Met Pro Gln Thr Phe Pro Phe Ser His Gln
 245 250 255
 His Thr Gly Ser Ser Phe Lys Ser Phe Cys Ser Val Ser Asn His Ser
 260 265 270
 Ser Ala Gly Thr Gly Trp Gly Gln Asp Gly Val Arg Pro Cys Arg Pro
 275 280 285
 Trp Pro Ser Arg Ser Val Pro Leu Arg Arg Leu Pro Gln Arg His Gly
 290 295 300
 Arg Leu Leu Lys Ala Thr Glu Arg Ser Thr Cys Trp Thr Pro Thr Thr
 305 310 315 320
 Arg Ala Thr Pro Ser Cys Gly Cys Pro
 325

<210> 3487

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3487

Met Ile Glu Ile Leu Asn Lys Ser Lys Asn Cys Glu Gly Phe Ser Glu
1 5 10 15
Arg Arg Thr Gly Arg Gly Ile Trp Thr Trp Val Cys Met His Arg Pro
20 25 30
Gly Cys Ser Arg Val Ala Asp Gln Gln His Leu Glu Asp Phe Thr Glu
35 40 45
Cys Phe Cys His Leu His Pro Ser Trp Pro Arg Pro Ala Leu Phe Pro
50 55 60
Leu Leu Leu Gln Leu Ile Phe Pro Asp Leu Val Glu Gly Leu Val Leu
65 70 75 80
Val Asn Ile Asp Pro Asn Gly Lys Trp Ile Asp Trp Ala Ala Thr
85 90 95
Lys Leu Ser Gly Leu Thr Ser Thr Leu Pro Asp Thr Val Leu Ser His
100 105 110
Leu Phe Ser Gln Glu Glu Leu Val Asn Asn Thr Glu Leu Val Gln Ser
115 120 125
Tyr Arg Gln Gln Ile Gly Asn Val Val Asn Gln Ala Asn Leu Gln Leu
130 135 140
Phe Trp Asn Met Tyr Asn Ser His Phe Pro Gly Ala Leu Trp Ala Gln
145 150 155 160
Leu Val Leu

<210> 3488

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3488

Met Asn Gly Arg Leu Ser Lys Glu Asp Val Tyr Ala Ala Ser Lys His

1

5

10

15

Glu Lys Ser Ser Ser Ser Leu Phe Ile Arg Glu Met Gln Ile Lys Thr

20

25

30

Ala Met Arg Tyr His Leu Met Pro Val Arg Met Val Val Ile Lys Lys

35

40

45

Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu

50

55

60

Leu His Cys Trp Trp Glu Gly Lys Leu Val Gln Pro Leu Trp Lys Thr

65

70

75

80

Val Trp Gln Phe Thr Lys Asp Leu Val Leu Glu Ile Pro Phe Asp Pro

85

90

95

Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys

100

105

<210> 3489

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3489

Met Glu Lys Asn Ile Ser Leu Tyr Glu Tyr Thr Thr Phe Cys Leu Ser

1	5	10	15												
Ile	Tyr	Pro	Leu	Ile	Gly	Cys	Phe	Tyr	Phe	Phe	Leu	Ala	Ile	Met	Asn
20				25							30				
Asn	Ile	Ala	Val	Asn	Ile	Cys	Val	Gln	Gly	Phe	Ser	Gly	His	Lys	Phe
35				40							45				
Leu	Phe	Leu	Gly	Ile	Tyr	Leu	Gly	Val	Glu	Leu	Leu	Gly	His	Ile	
50		55				60									
Val	Ile	Leu	Phe	Asn	Phe	Leu	Lys	Asn	Phe	Pro	Thr	Val	Leu	His	Gly
65		70			75						80				
Gly	Cys	Ala	Ile	Val	Tyr	Ser	Tyr	Gln	Gln	Cys	Met	Lys	Leu	Gln	Ile
85			90								95				
Ser	Pro	His	Pro	Glu	Asn	Pro	Phe	Ile	Ile	Phe	Cys	Phe	Ser	Phe	
100			105								110				

<210> 3490

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3490

1	5	10	15												
Met	Val	Ser	Arg	Pro	Pro	Arg	Thr	Pro	Leu	Ser	Pro	Ser	Ser	Trp	Thr
20				25											
Pro	Ala	Met	Gly	Leu	Arg	Ala	Ser	Arg	Asn	Cys	Ser	Arg	Thr	Glu	Asn
35				40											
Ala	Val	Cys	Gly	Cys	Ser	Pro	Gly	His	Phe	Cys	Ile	Val	Gln	Asp	Gly
50															
Asp	His	Cys	Ala	Ala	Cys	Arg	Ala	Tyr	Ala	Thr	Ser	Ser	Pro	Gly	Gln
55															
60															

Arg Val Gln Lys Gly Gly Thr Glu Ser Gln Asp Thr Leu Cys Gln Asn
 65 70 75 80
 Cys Pro Pro Gly Thr Phe Ser Pro Asn Gly Thr Leu Glu Glu Cys Gln
 85 90 95
 His Gln Thr Lys Cys Ser Trp Leu Val Thr Lys Ala Gly Ala Gly Thr
 100 105 110
 Ser Ser Ser His Trp Val Trp Trp Phe Leu Ser Gly Ser Leu Val Ile
 115 120 125
 Val Ile Val Cys Ser Thr Val Gly Leu Ile Ile Cys Val Lys Arg Arg
 130 135 140
 Lys Pro Arg Gly Asp Val Val Lys Val Ile Val Ser Val Gln Arg Lys
 145 150 155 160
 Arg Gln Glu Ala Glu Gly Glu Ala Thr Val Ile Glu Ala Leu Gln Ala
 165 170 175
 Pro Pro Asp Val Thr Thr Val Ala Val Glu Glu Thr Ile Pro Ser Phe
 180 185 190
 Thr Gly Arg Ser Pro Asn His
 195

<210> 3491

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3491

Met Arg Lys Glu Lys Gln Ser Lys Ser Leu Leu Tyr Leu Leu Lys Ile
 1 5 10 15
 Ser Ser Leu Phe Ser Ser Thr Leu Phe His Gln His Leu Pro Ala Gln

20	25	30
Asn Phe His Asn Asp Pro Ile Leu Lys Pro Asn Ser Val Ser Arg Leu		
35	40	45
Leu Thr Ser Thr Ile Ala Arg Thr His Glu Asn Leu Leu Ile Gln Ala		
50	55	60
His Ala Met Ala Gln Ala His Ala Glu Gln Ala Pro Leu Thr Pro Leu		
65	70	75
Leu Leu Pro Ser Ala Ser Thr Ala Leu Leu Asn Arg His Val Asn Thr		
85	90	95
Gly Pro Phe Met His Arg Ser Lys Gly Ser Leu Arg Pro Lys Ala Leu		
100	105	110
Cys Thr Thr Leu Cys Asp Ser Leu		
115	120	

<210> 3492

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3492

Met Val Ser Ala Ala Leu Ile Ser Gln Ser Leu Pro Arg Ser Pro His		
1	5	10
Ser Arg Ser Pro Pro Leu Ala Arg Ser Arg Arg Leu Pro Thr Pro Arg		
20	25	30
Ser Arg Pro Leu Arg Pro Ser Phe Leu Pro His Pro Ser Pro Arg Pro		
35	40	45
Arg Asn Trp Pro Gly Pro Ser Lys Cys Arg Pro Arg Ser Arg Leu Gln		
50	55	60

Asn Phe Leu Lys Leu Ser Asn Ser Lys His Pro Trp Pro Ala Ser Ser
 65 70 75 80
 Lys Leu Pro Leu Leu Pro Ser Arg Leu Leu His Arg Leu Trp Arg Ser
 85 90 95
 Arg Arg Arg Arg Pro Gly Ser Arg Cys Arg
 100 105

<210> 3493

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3493

Met His Leu Leu Leu Leu Ser Ser Tyr Leu Asn Leu Leu Gln Arg
 1 5 10 15

Met Leu Trp Arg Leu Pro Trp Leu Ser His Val Ile His Lys Glu His
 20 25 30

Ala Thr Thr Ile Gln Phe Leu Gln Pro Arg Gly Arg Glu Gln Gln Tyr
 35 40 45

Leu Cys Arg Arg His Ser Glu Leu Pro Ser Ala Ser Arg Asn Gln
 50 55 60

Ile Ser Glu Arg Arg Leu Ser Ala Tyr Leu Arg Thr Ile Ser Gly Val
 65 70 75 80

Thr Val Cys Ser Asp Gly Leu Ser Thr Ser Val Trp Ser Cys Leu Leu
 85 90 95

Phe Arg Arg Asp Leu Asp Pro Ala Trp Met Met Glu Gly Lys Gly Leu
 100 105 110

Ala Gln Gly Glu Gly

115

<210> 3494

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3494

Met Cys Val Cys Cys Phe Ile Phe Leu Met Leu Cys Leu Gly Arg Glu

1 5 10 15

Cys Ser Tyr Ile Tyr Val Tyr Ile Leu Tyr Ser Pro Ile Trp Glu Ser

20 25 30

Arg Ser Glu Val Ile Ala Ser Ser Asp Cys Phe Ser Ser Glu Val Gly

35 40 45

Tyr His Trp Phe Thr Cys Leu Tyr Leu Asn Val Leu Pro Ser Val Glu

50 55 60

Ser Pro Ala Cys Gly Glu Glu Ser Leu Leu Val Met Phe Leu Phe Ser

65 70 75 80

Val Phe Met Gly Glu Phe Ile Gln Met Phe Tyr Leu Phe Gln Ser Thr

85 90 95

Leu Asp Cys Ala Glu Met Ser Ser Ser Val Ala Gln Glu Lys Ala

100 105 110

<210> 3495

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3495

Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr
 1 5 10 15
 Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys
 20 25 30
 Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly
 35 40 45
 Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser
 50 55 60
 Arg Tyr Cys Pro Arg Ala Pro Thr Leu Ser Cys His Pro His Ser Leu
 65 70 75 80
 His Thr Trp Gln Glu Gly Asp Ala Lys Pro Cys Val Leu Thr Gln Ala
 85 90 95
 Arg Ser Cys Leu Leu Gly Gly Glu Gly Cys Asp Arg Ala Ala Cys
 100 105 110
 Pro Gly Pro Gly Ala Arg Gly Arg Arg Ser Cys Arg Trp Pro Gly Gly
 115 120 125
 Met Glu Asn Met Pro Gln Glu Arg Ala Phe Asp Leu Ser Leu Ser Leu
 130 135 140
 Ala Cys Gln Trp Gly Lys Gln Arg Gly Val Gln Val Glu Gly Pro Lys
 145 150 155 160
 Asp Lys Ala Val Leu Gly Lys Pro
 165

<210> 3496

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3496

Met Asp Ser Ser Tyr Leu Asp Asn Gln Gly Ile Ala Pro Ser Lys Lys

1	5	10	15
---	---	----	----

Pro Met Pro Ser Tyr Lys Cys Gln Ser His Trp Ala Asn Gln Gln Thr

20	25	30
----	----	----

Leu Ser Gln Arg Ala Pro Leu Gly Phe Thr Gly Gln Trp Thr Asn Gln

35	40	45
----	----	----

Arg Arg Phe Gln Ser Ala Ser His Cys Gly Thr Ala Arg His Ser Leu

50	55	60
----	----	----

Cys Pro Ala Arg Ser Gly Thr Phe Leu Asp Pro Val Ser Ser Ile Ile

65	70	75	80
----	----	----	----

Leu Asp Cys Gln Leu Pro Glu Val Arg Lys Leu Ile Phe Tyr Phe Phe

85	90	95
----	----	----

Ser Leu Arg Leu Leu Asn Leu Phe Gln Leu His Leu Ser Thr Glu Leu

100	105	110
-----	-----	-----

Ser Ser Tyr Gln Val Leu Arg His Ile Asn Asp Ala Asn Leu Val Pro

115	120	125
-----	-----	-----

Phe Leu Val Trp Pro Asn Ser Lys Val Glu Glu Leu Gly Asn Lys Ser

130	135	140
-----	-----	-----

<210> 3497

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3497

Met Lys Leu Ser Val Asn Glu Ala Gln Leu Gly Phe Tyr Leu Gly Ser
 1 5 10 15
 Leu Ser His Leu Ser Ala Cys Pro Gly Ile Asp Pro Arg Ser Ser Glu
 20 25 30
 Asp Gln Pro Glu Ser Leu Lys Thr Gly Gln Met Met Asp Glu Ser Asp
 35 40 45
 Glu Asp Phe Lys Glu Leu Cys Ala Ser Phe Phe Gln Arg Val Lys Lys
 50 55 60
 His Gly Ile Lys Glu Val Ser Gly Glu Arg Lys Thr Gln Lys Ala Ala
 65 70 75 80
 Ser Asn Gly Thr Gln Ile Arg Ser Lys Leu Lys Arg Thr Lys Gln Thr
 85 90 95
 Ala Thr Lys Thr Lys Thr Leu Gln Gly Pro Ala Glu Lys Lys Pro Pro
 100 105 110
 Ser Gly Ser Gln Ala Pro Arg Thr Lys Lys Gln Arg Val Thr Lys Trp
 115 120 125
 Gln Ala Ser Glu Pro Ala His Ser Val Asn Gly Glu Gly Gly Val Leu
 130 135 140
 Ala Ser Ala Pro Asp Pro Pro Val Leu Arg Glu Thr Ala Gln Asn Thr
 145 150 155 160
 Gln Thr Gly Asn Gln Gln Glu Pro Ser Pro Asn Leu Ser Arg Glu Lys
 165 170 175
 Thr Arg Glu Asn Val Pro Asn Ser Asp Ser Gln Pro Pro Pro Ser Cys
 180 185 190
 Leu Thr Thr Ala Val Pro Ser Pro Ser Lys Pro Arg Thr Ala Gln Leu
 195 200 205
 Val Leu Gln Arg Met Gln Gln Phe Lys Arg Ala Asp Pro Glu Arg Leu
 210 215 220
 Arg His Ala Ser Glu Glu Cys Ser Leu Glu Ala Ala Arg Glu Glu Asn

225	230	235	240
Val Pro Lys Asp Pro Gln Glu Glu Met Met Ala Gly Asn Val Tyr Gly			
245	250	255	
Leu Gly Pro Pro Ala Pro Glu Ser Asp Ala Ala Val Ala Leu Thr Leu			
260	265	270	
Gln Gln Glu Phe Ala Arg Val Gly Ala Ser Ala His Asp Asp Ser Leu			
275	280	285	
Glu Glu Lys Gly Leu Phe Phe Cys Gln Ile Cys Gln Lys Asn Leu Ser			
290	295	300	
Ala Met Asn Val Thr Arg Arg Glu Gln His Val Asn Arg Trp Gly Gln			
305	310	315	320
Leu Gly Pro Ser Pro Leu Pro Cys Met			
	325		

<210> 3498

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3498

Met Arg Gly Gly Gly Ser Ser Gly Glu Ile Gly Cys Phe Leu Leu Ser			
1	5	10	15
Phe Ser Glu Lys Phe Leu Glu Arg Trp Ser Gln Arg Asp Ala Gly Gly			
20	25	30	
Trp Gly Ala Pro Gly Ser Lys Arg Leu Lys Glu Ser Glu Lys Thr Gln			
35	40	45	
Ala His Arg Asp Thr Ser Asn Leu Arg Ala Thr Ala Gln Ala Glu Pro			
50	55	60	

Lys Ala Thr Glu Thr Leu Thr Pro Glu Lys Lys His Arg Asp Arg Gly
 65 70 75 80
 Ser Arg Ser Ser Leu Cys His Cys Ser Ala Pro Glu Thr Pro Gln His
 85 90 95
 Gly Glu Arg Ala Gly Gly Ser His Glu Lys Pro Arg Ala Leu Thr Gly
 100 105 110
 Leu Leu Arg Gly Gly Arg Lys Ala Glu Thr Arg Pro Leu Glu Pro Pro
 115 120 125
 Val Arg Thr Gly Pro Val Glu Trp Ala Gln Tyr Val Arg Thr Gln Arg
 130 135 140
 Gly Arg Gln Ser Ile Gly Trp Gly Arg Leu Ser Leu Ile Phe Pro Arg
 145 150 155 160
 Phe Ser Leu Leu Ser Gly Ser Val Val Leu Ser Pro Pro Ile Phe Thr
 165 170 175
 Leu Val Ala

<210> 3499

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3499

Met Thr Arg Ala Arg Ile Gly Cys Phe Gly Pro Gly Gly Arg Ala Arg
 1 5 10 15
 Gly Thr Glu Ser Ala Pro Glu Pro Ser Lys Arg Val Pro Pro Gly Arg
 20 25 30
 Ser Trp Gln Thr Gln Glu Val Arg Gln Thr Arg Gly Ala Asn Gly Leu

35	40	45
Gly Pro Arg Ala Gly Ser Ala Gly Ala Lys Ala Pro Gly Pro Ala Gln		
50	55	60
Gly Ala Ala Gln His Gly Leu Gly Gly Ser Ala Gly Leu Arg Val Arg		
65	70	75
Val Ser Pro Leu Ala Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu		
85	90	95
Val Leu Cys Leu Val Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu		
100	105	110
Pro Met Trp Gln Val Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala		
115	120	125
Gln Thr Thr Trp Lys Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr		
130	135	140
Gly His Met Gln Cys Lys Val Tyr Asp Ser Val Leu Ala Leu Ser Thr		
145	150	155
160		
Glu Val Gln Ala Ala Arg Ala Leu Thr Val Ser Ala Val Leu Leu Ala		
165	170	175
Phe Val Ala Leu Phe Val Thr Leu Ala Gly Ala Gln Cys Thr Thr Cys		
180	185	190
Val Ala Pro Gly Pro Ala Lys Ala Arg Val Ala Leu Thr Gly Gly Val		
195	200	205
Leu Tyr Leu Phe Cys Gly Leu Leu Ala Leu Val Pro Leu Cys Trp Phe		
210	215	220
Ala Asn Ile Val Val Arg Glu Phe Tyr Asp Pro Ser Val Pro Val Ser		
225	230	235
240		
Gln Lys Tyr Glu Leu Gly Ala Ala Leu Tyr Ile Gly Trp Ala Ala Thr		
245	250	255
Ala Leu Leu Met Val Gly Gly Cys Leu Leu Cys Cys Gly Ala Trp Val		
260	265	270

Cys Thr Gly Arg Pro Asp Leu Ser Phe Pro Val Lys Tyr Ser Ala Pro

275

280

285

Arg Arg Pro Thr Ala Thr Gly Asp Tyr Asp Lys Lys Asn Tyr Val

290

295

300

<210> 3500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3500

Met Arg Asn Leu Gln Ser Ser Ile Gln Asn Trp Arg Arg His Thr Gln

1

5

10

15

Thr Thr Leu Gln Gly Arg Leu Ala Ala Glu Ala Gly Pro Met Lys Lys

20

25

30

Met Met Lys Lys Thr Met Arg Met Tyr His Val Tyr Tyr Trp Pro Gln

35

40

45

Thr Thr Ser Pro Leu Pro Arg Val Ala His Arg Lys Gln Pro Ala Pro

50

55

60

Phe Phe Phe Leu Phe Ser Pro Thr Thr His His Pro Ser Leu Gln Thr

65

70

75

80

Leu Pro Pro Thr Arg Leu Gly Cys Arg Val Cys Glu Ala Ala Gln Lys

85

90

95

Val Cys Lys Ser Pro Leu Cys Leu Ile Cys Val Phe Pro Arg Lys Arg

100

105

110

Ala Gly Ser Leu

115

<210> 3501

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3501

Met Phe His His Gln Gln Ala Tyr Cys Leu Ala Pro Phe Asp Leu Ile

1 5 10 15

Lys Val Arg Leu Gln Asn Gln Thr Glu Pro Arg Ala Gln Pro Gly Ser

20 25 30

Pro Pro Pro Arg Tyr Gln Gly Pro Val His Cys Ala Ala Ser Ile Phe

35 40 45

Arg Glu Glu Gly Pro Arg Gly Leu Phe Arg Gly Ala Trp Ala Leu Thr

50 55 60

Leu Arg Asp Thr Pro Thr Val Gly Ile Tyr Phe Ile Thr Tyr Glu Gly

65 70 75 80

Leu Cys Arg Gln Tyr Thr Pro Glu Gly Gln Asn Pro Ser Ser Ala Thr

85 90 95

Val Leu Trp Gln Gly Ala Leu Gln Ala Leu Leu Pro Gly Trp Gln Pro

100 105 110

Arg Pro

<210> 3502

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3502

Met Ala Gly Thr Leu Asp Leu Asp Lys Gly Cys Thr Val Glu Glu Leu
 1 5 10 15

Leu Arg Gly Cys Ile Glu Ala Phe Asp Asp Ser Gly Lys Val Arg Asp
 20 25 30

Pro Gln Leu Val Arg Met Phe Leu Met Met His Pro Trp Tyr Ile Pro
 35 40 45

Ser Ser Gln Leu Ala Ala Lys Leu Leu His Ile Tyr Gln Gln Ser Arg
 50 55 60

Lys Asp Asn Ser Asn Ser Leu Gln Val Lys Thr Cys His Leu Val Arg
 65 70 75 80

Tyr Trp Ile Ser Ala Phe Pro Ala Glu Phe Asp Leu Asn Pro Glu Leu
 85 90 95

Ala Glu Gln Ile Lys Glu Leu Lys Ala Leu Leu Asp Gln Glu Gly Asn
 100 105 110

Arg Arg His Ser Ser Leu Ile Asp Ile Asp Ser Val Cys Val Gly Gly
 115 120 125

Ala Gln Arg Ala Gly Gly Ala Leu Ser Ile Leu Tyr His Leu Cys Leu
 130 135 140

Ile Asn Val Cys

145

<210> 3503

<211> 599

<212> PRT

<213> Homo sapiens

<400> 3503

Met Glu His Phe Leu Leu Glu Val Ala Ala Ala Pro Leu Arg Leu Ile
 1 5 10 15
 Ala Ala Lys Asn Glu Lys Ser Arg Ser Glu Leu Gly Arg Phe Leu Ala
 20 25 30
 Lys Gln Val Trp Thr Pro Gln Asp Arg Gln Cys Val Leu Ser Thr Leu
 35 40 45
 Ala Gln Leu Leu Leu Asp Lys Asp Cys Thr Val Leu Val Gly Arg Gln
 50 55 60
 Leu Arg Pro Leu Leu Leu Asp Leu Leu Glu Arg Asn Ala Glu Ala Ile
 65 70 75 80
 Lys Ala Gly Gly Gln Ile Asn His Asp Leu His Glu Arg Leu Cys Val
 85 90 95
 Ser Met Ser Lys Leu Ile Gly Asn His Pro Asp Val Leu Pro Phe Ala
 100 105 110
 Leu Arg Tyr Phe Lys Asp Thr Ser Pro Val Phe Gln Arg Leu Phe Leu
 115 120 125
 Glu Ser Ser Asp Ala Asn Pro Val Arg Tyr Gly Arg Arg Arg Met Lys
 130 135 140
 Leu Arg Asp Leu Met Glu Ala Ala Phe Lys Phe Leu Gln Gln Glu Gln
 145 150 155 160
 Ser Val Phe Arg Glu Leu Trp Asp Trp Ser Val Cys Val Pro Leu Leu
 165 170 175
 Arg Ser His Asp Thr Leu Val Arg Trp Tyr Thr Ala Asn Cys Leu Ala
 180 185 190
 Leu Val Thr Cys Met Asn Glu Glu His Lys Leu Ser Phe Leu Lys Lys
 195 200 205
 Ile Phe Asn Ser Asp Glu Leu Ile His Phe Arg Leu Arg Leu Leu Glu
 210 215 220

Glu Ala Gln Leu Gln Asp Leu Glu Lys Ala Leu Val Leu Ala Asn Pro
 225 230 235 240
 Glu Val Ser Leu Trp Arg Lys Gln Lys Glu Leu Gln Tyr Leu Gln Gly
 245 250 255
 His Leu Val Ser Ser Asp Leu Ser Pro Arg Val Thr Ala Val Cys Gly
 260 265 270
 Val Val Leu Pro Gly Gln Leu Pro Ala Pro Gly Glu Leu Gly Gly Asn
 275 280 285
 Arg Ser Ser Ser Arg Glu Gln Glu Leu Ala Leu Arg Ser Tyr Val Leu
 290 295 300
 Val Glu Ser Val Cys Lys Ser Leu Gln Thr Leu Ala Met Ala Val Ala
 305 310 315 320
 Ser Gln Asn Ala Val Leu Leu Glu Gly Pro Ile Gly Cys Gly Lys Thr
 325 330 335
 Ser Leu Val Glu Tyr Leu Ala Ala Val Thr Gly Arg Thr Lys Pro Pro
 340 345 350
 Gln Leu Leu Lys Val Gln Leu Gly Asp Gln Thr Asp Ser Lys Met Leu
 355 360 365
 Leu Gly Met Tyr Arg Cys Thr Asp Val Pro Gly Glu Phe Val Trp Gln
 370 375 380
 Pro Gly Thr Leu Thr Gln Ala Ala Thr Met Gly His Trp Ile Leu Leu
 385 390 395 400
 Glu Asp Ile Asp Tyr Ala Pro Leu Asp Val Val Ser Val Leu Ile Pro
 405 410 415
 Leu Leu Glu Asn Gly Glu Leu Leu Ile Pro Gly Arg Gly Asp Cys Leu
 420 425 430
 Lys Val Ala Pro Gly Phe Gln Phe Ala Thr Arg Arg Leu Leu Ser
 435 440 445
 Cys Gly Gly Asn Trp Tyr Arg Pro Leu Asn Ser His Ala Thr Leu Leu

450	455	460	
Asp Lys Tyr Trp Thr Lys Ile His Leu Asp Asn Leu Asp Lys Arg Glu			
465	470	475	480
Leu Asn Glu Val Leu Gln Ser Arg Tyr Pro Ser Leu Leu Ala Val Val			
485	490	495	
Asp His Leu Leu Asp Ile Tyr Ile Gln Leu Thr Gly Glu Lys His His			
500	505	510	
Ser Trp Ser Asp Ser Ser Val Gly Cys Glu Gln Ala Pro Glu Glu Val			
515	520	525	
Ser Glu Ala Arg Arg Glu Asn Lys Arg Pro Thr Leu Glu Gly Arg Glu			
530	535	540	
Leu Ser Leu Arg Tyr Trp Thr Lys Gln Phe Phe Leu Phe Phe Leu Ser			
545	550	555	560
Phe Phe Phe Val Arg Gln Ile Pro Ala Leu Leu Pro Arg Leu Glu Cys			
565	570	575	
Ser Gly Ala Val Leu Ala His Ser Asn Leu Arg Leu Leu Gly Ser Lys			
580	585	590	
Phe Leu Pro Ala Arg Ser Lys			
595			

<210> 3504

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3504

Met Ser Ser Glu Glu Ser Gly Thr Ser Ile Ser Leu Leu Pro Ala Leu

1

5

10

15

Ser Leu Ala Ala Pro Asp Pro Gly Gln Arg Ser Ser Ser Gln Pro Ser
 20 25 30
 Pro Ala Ile Cys Ser Ala Pro Ala Thr Leu Thr Pro Arg Ser Pro His
 35 40 45
 Ala Ser Arg Thr Pro Ser Ser Pro Leu Gln Ser Cys Thr Pro Ser Leu
 50 55 60
 Ser Pro Arg Ser His Val Pro Ser Pro His Gln Ala Leu Val Thr Arg
 65 70 75 80
 Pro Gln Lys Pro Ser Leu Glu Phe Lys Glu Phe Val Gly Leu Pro Cys
 85 90 95
 Lys Asn Arg Pro Pro Phe Pro Arg Thr Gly Ala Thr Arg Gly Ala Gln
 100 105 110
 Glu Pro Cys Ser Val Trp Glu Pro Pro Lys Arg His Arg Asp Gly Ser
 115 120 125
 Ala Phe Gln Tyr Glu Tyr Glu Pro Pro Cys Thr Ser Leu Cys Ala Arg
 130 135 140
 Val Gln Ala Val Arg
 145

<210> 3505
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 3505
 Met Ser His Thr Ser His Leu Thr Leu Lys Ile Cys Val Ile His Arg
 1 5 10 15
 Pro Thr Leu Arg Tyr Leu Thr Leu Ile Ala Tyr Arg Gln His Val Arg

20

25

30

Ala Pro Arg Gly Arg Cys Ser His Pro Asp Lys Lys Ser Ala Ala Leu

35

40

45

Val Leu Arg Ile Leu Phe Pro Arg Thr Glu Ala Leu Pro Ser Thr Ile

50

55

60

Ser Leu Ala Leu Ala Glu Ser Ser Ser Pro Ile Ala Ser Leu Ser Ser

65

70

75

80

Thr Ser His Ala Ala Leu Arg Pro Gln Gly Asp Gly Gly Arg Gly Val

85

90

95

Glu Thr Arg Met Glu Trp Asn Ile Phe Ile Lys

100

105

<210> 3506

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3506

Met Leu Trp Leu Phe Gln Ser Leu Leu Phe Val Phe Cys Phe Gly Pro

1

5

10

15

Gly Asn Val Val Ser Gln Ser Ser Leu Thr Pro Leu Met Val Asn Gly

20

25

30

Ile Leu Gly Glu Ser Val Thr Leu Pro Leu Glu Phe Pro Ala Gly Glu

35

40

45

Lys Val Asn Phe Ile Thr Trp Leu Phe Asn Glu Thr Ser Leu Ala Phe

50

55

60

Ile Val Pro His Glu Thr Lys Ser Pro Glu Ile His Val Thr Asn Pro

65

70

75

80

Lys Gln Gly Lys Arg Leu Asn Phe Thr Gln Ser Tyr Ser Leu Gln Leu
 85 90 95
 Ser Asn Leu Lys Met Glu Asp Thr Gly Ser Tyr Arg Ala Gln Ile Ser
 100 105 110
 Thr Lys Thr Ser Ala Lys Leu Ser Ser Tyr Thr Leu Arg Ile Leu Arg
 115 120 125
 Gln Leu Arg Asn Ile Gln Val Thr Asn His Ser Gln Leu Phe Gln Asn
 130 135 140
 Met Thr Cys Glu Leu His Leu Thr Cys Ser Val Glu Asp Ala Asp Asp
 145 150 155 160
 Asn Val Ser Phe Arg Trp Glu Ala Leu Gly Asn Thr Leu Ser Ser Gln
 165 170 175
 Pro Asn Leu Thr Val Ser Trp Asp Pro Arg Ile Ser Ser Glu Gln Asp
 180 185 190
 Tyr Thr Cys Ile Ala Glu Asn Ala Val Ser Asn Leu Ser Phe Ser Val
 195 200 205
 Ser Ala Gln Lys Leu Cys Glu Asp Val Lys Ile Gln Tyr Thr Asp Thr
 210 215 220
 Lys Met Ile Leu Phe Met Val Ser Gly Ile Cys Ile Val Phe Gly Phe
 225 230 235 240
 Ile Ile Leu Leu Leu Val Leu Arg Lys Arg Arg Asp Ser Leu Ser
 245 250 255
 Leu Ser Thr Gln Arg Thr Gln Gly Pro Glu Ser Ala Arg Asn Leu Glu
 260 265 270
 Tyr Val Ser Val Ser Pro Thr Asn Asn Thr Val Tyr Ala Ser Val Thr
 275 280 285
 His Ser Asn Arg Glu Thr Glu Ile Trp Thr Pro Arg Glu Asn Asp Thr
 290 295 300
 Ile Thr Ile Tyr Ser Thr Ile Asn His Ser Lys Glu Ser Lys Pro Thr

305	310	315	320
-----	-----	-----	-----

Phe Ser Arg Ala Thr Ala Leu Asp Asn Val Val

325	330	
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<210> 3507

<211> 160

<212> PRT

<213> Homo sapiens

<400> 3507

Met Pro Ala Ile Ser Val Ser Pro Ser Leu Gln Lys Tyr Ser Lys Gln

1	5	10	15
---	---	----	----

Gln Lys Leu Asn Thr Tyr Glu Val Asn Thr Lys Asp Leu His Arg Lys

20	25	30
----	----	----

Ile Ser Gly Ser Ser Val Asp Ala Ile Ala His Cys Ser Ala Gly Gln

35	40	45
----	----	----

Ser Ser Gly Leu Ser Phe Asp Phe Gly Pro Val Leu Gln Asn Gln Gln

50	55	60
----	----	----

Pro Phe Ser Gln Lys Thr Val Glu Cys Ser Gln Asp His Leu Trp Lys

65	70	75	80
----	----	----	----

Val Asn Tyr Ser Ile Phe Asn Leu Leu Pro Trp Ala Met Met Ser Glu

85	90	95
----	----	----

Thr Gln His Gly Gly Arg Thr Ser Ser Cys Val Gly Asn Leu Ser Glu

100	105	110
-----	-----	-----

Pro Pro Trp Arg Pro Pro Lys Trp Leu Trp Gln Ser Cys Arg Gly Gly

115	120	125
-----	-----	-----

Gly Asn Lys Lys Gly Asp Thr Trp Leu Ser Phe Leu Asn Gln Leu Thr

130	135	140
-----	-----	-----

Met Gly Thr His Leu Tyr Trp Asn Phe Arg Val Arg Lys Tyr Gln Asn
 145 150 155 160

<210> 3508

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3508

Met Lys Ser Cys Ser Leu Ala Gly Ala Gly Val Gln Trp His Asp Phe
 1 5 10 15
 Gly Ser Leu Gln Pro Pro Pro Ser Phe Arg Arg Phe Ser Cys Leu
 20 25 30
 Thr Leu Pro Arg Ala Gly Ile Thr Gly Val His His His Ser Trp Leu
 35 40 45
 Ile Phe Val Phe Leu Val Gln Met Arg Phe His His Val Gly Gln Ala
 50 55 60
 Gly Phe Glu Leu Met Thr Leu Ser Gly Leu Pro Ala Leu Ala Ser Gln
 65 70 75 80
 Asn Ala Gly Ile Thr Gly Met Ser Tyr Tyr Ala Trp Pro Gly Leu Ile
 85 90 95
 Leu Glu Ile Asp Arg Leu Cys Val Ala Leu Ala Thr Val Gln Trp Leu
 100 105 110
 Phe Thr Ala Val Ile Met Ala His Arg Ser Pro Lys Leu Lys Val Gly
 115 120 125
 Ser Ser Cys Leu Pro Ile Ser Ala Phe Leu Val Ala Arg Thr Thr Gly
 130 135 140
 Thr Leu His His Thr Gln Leu Val Leu Gly Val Leu Ser Lys Leu Asp

145

150

155

160

Thr Trp

<210> 3509

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3509

Met Ala Lys Glu Ile Lys Ser Asn Arg Gln Glu Arg Gly Ala Thr Gly

1

5

10

15

Leu Val Asn Ser Gln Thr Glu Leu Val Ile Gly Gln Trp Lys Val Asp

20

25

30

Cys Ser Thr Phe Pro Phe Leu Lys Val Val Cys Tyr Lys Glu Pro Pro

35

40

45

Leu His Val Arg Ala Ala Leu Asp Ser Leu Ser Phe Ile His Met Ser

50

55

60

Glu Gly Leu Cys Ser Arg Ala Met Arg Glu Glu Phe Ala Thr Leu Arg

65

70

75

80

Ala Val Ser Trp Asn Pro Gly Ala Pro Phe His Val Ser Leu Gly Ala

85

90

95

Glu Arg Val Thr His Val Trp Glu Trp Tyr Val Trp Gln Ser Met Trp

100

105

110

Ala Phe Gly Phe Leu His Trp Cys Ala His Ile Leu Cys Pro Met Ile

115

120

125

Phe Asn Leu Asp Lys Glu Ile Asp Ile Cys Phe Pro His Leu Gly Asp

130

135

140

Lys

145

<210> 3510

<211> 606

<212> PRT

<213> Homo sapiens

<400> 3510

Met Phe Gly Asn Glu Cys Cys Phe Ser Thr Gly Glu Val Ile Lys Ile
1 5 10 15

Thr Gly Leu Lys Val Lys Lys Ile Ile Ala Glu Ile Cys Glu Gln Ile
20 25 30

Glu Gly Cys Glu Phe Leu Gln Pro Phe Glu Leu Pro Met Asn Phe Pro
35 40 45

Gly Leu Phe Lys Ile Val Ala Asp Lys Thr Pro Tyr Leu Thr Met Glu
50 55 60

Glu Ile Thr Arg Thr Ile His Ile Gly Pro Ser Arg Leu Gly His Pro
65 70 75 80

Cys Phe Tyr His Gln Lys Asp Ile Lys Leu Glu Asn Leu Ile Ile Lys
85 90 95

Gln Gly Glu Gln Ile Met Leu Asn Ser Val Glu Glu Ile Asp Gly Glu
100 105 110

Ile Met Val Ser Cys Ala Val Ala Arg Asn His Gln Thr His Ser Phe
115 120 125

Asn Leu Pro Leu Ser Gln Glu Gly Glu Phe Tyr Glu Cys Glu Asp Glu
130 135 140

Arg Ile Tyr Thr Leu Lys Glu Ile Val Glu Trp Lys Ile Pro Lys Asn

145	150	155	160
Arg Thr Arg Thr Val Asn Leu Thr Asp Phe Ser Asn Lys Trp Asp Ser			
165	170	175	
Thr Asn Pro Phe Pro Lys Asp Phe Cys Gly Thr Leu Ile Leu Lys Pro			
180	185	190	
Val Tyr Glu Ile Gln Gly Val Met Lys Phe Arg Lys Asp Ile Ile Arg			
195	200	205	
Ile Leu Pro Ser Leu Asp Val Glu Val Lys Asp Ile Thr Asp Ser Tyr			
210	215	220	
Asp Ala Asn Trp Phe Leu Gln Leu Leu Ser Thr Glu Asp Leu Phe Glu			
225	230	235	240
Met Thr Ser Lys Glu Phe Pro Ile Val Thr Glu Val Ile Glu Ala Pro			
245	250	255	
Glu Gly Asn His Leu Pro Gln Ser Ile Leu Gln Pro Gly Lys Thr Ile			
260	265	270	
Val Ile His Lys Tyr Gln Ala Ser Arg Ile Leu Ala Ser Glu Ile			
275	280	285	
Arg Ser Asn Phe Pro Lys Arg His Phe Leu Ile Pro Thr Ser Tyr Lys			
290	295	300	
Gly Lys Phe Lys Arg Arg Pro Arg Glu Phe Pro Thr Ala Tyr Asp Leu			
305	310	315	320
Glu Ile Ala Lys Ser Glu Lys Glu Pro Leu His Val Val Ala Thr Lys			
325	330	335	
Ala Phe His Ser Pro His Asp Lys Leu Ser Ser Val Ser Val Gly Asp			
340	345	350	
Gln Phe Leu Val His Gln Ser Glu Thr Thr Glu Val Leu Cys Glu Gly			
355	360	365	
Ile Lys Lys Val Val Asn Val Leu Ala Cys Glu Lys Ile Leu Lys Lys			
370	375	380	

Ser Tyr Glu Ala Ala Leu Leu Pro Leu Tyr Met Glu Gly Gly Phe Val
 385 390 395 400
 Glu Val Ile His Asp Lys Lys Gln Tyr Pro Ile Ser Glu Leu Cys Lys
 405 410 415
 Gln Phe Arg Leu Pro Phe Asn Val Lys Val Ser Val Arg Asp Leu Ser
 420 425 430
 Ile Glu Glu Asp Val Leu Ala Ala Thr Pro Gly Leu Gln Leu Lys Glu
 435 440 445
 Asp Ile Thr Asp Ser Tyr Leu Leu Ile Ser Asp Phe Ala Asn Pro Thr
 450 455 460
 Glu Cys Trp Glu Ile Pro Val Gly Arg Leu Asn Met Thr Val Gln Leu
 465 470 475 480
 Val Ser Asn Phe Ser Arg Asp Ala Glu Pro Phe Leu Val Arg Thr Leu
 485 490 495
 Val Glu Glu Ile Thr Glu Glu Gln Tyr Tyr Met Met Arg Arg Tyr Glu
 500 505 510
 Ser Ser Ala Ser His Pro Pro Pro Arg Pro Pro Lys His Pro Ser Val
 515 520 525
 Glu Glu Thr Lys Leu Thr Leu Leu Thr Leu Ala Glu Glu Arg Thr Val
 530 535 540
 Asp Leu Pro Lys Ser Pro Lys Arg His His Val Asp Ile Thr Lys Lys
 545 550 555 560
 Leu His Pro Asn Gln Ala Gly Leu Asp Ser Lys Val Leu Ile Gly Ser
 565 570 575
 Gln Asn Asp Leu Val Asp Glu Glu Lys Glu Arg Ser Asn Arg Gly Ala
 580 585 590
 Thr Ala Val Ala Glu Thr Phe Lys Asn Glu Lys His Gln Lys
 595 600 605

<210> 3511

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3511

Met Glu Met Trp Glu Arg Gln Leu Phe Leu Thr Thr Gln Pro Ser Pro

1 5 10 15

Leu Pro Gly Gly Thr Pro Arg Asn Glu Ala Leu Pro Leu Arg Glu Phe

20 25 30

Pro Ala Thr Pro Ser Leu Gly Pro Gly Met Ala Ala Val Arg Ala Pro

35 40 45

Ala Pro Ser Gly Asp Ser Leu Gly Thr Asn Tyr His Arg Pro Trp Ala

50 55 60

Thr Ser Lys Ala Ala His Thr Asp Thr Pro Ser Leu Val Thr Ser Pro

65 70 75 80

Gln Glu Glu Gly His Pro Arg Lys Gly Gly Arg Leu Pro Gly Leu Glu

85 90 95

● Pro Leu Gln Gly Leu Thr Arg His

100

<210> 3512

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3512

Met Glu Ala Gly Cys Lys Leu Lys Leu Lys Pro Pro Leu Tyr Phe Ser
 1 5 10 15

Ser Thr Ile Gly Phe Glu Ser Pro Asp Gly Ser Ser Tyr Pro His Phe
 20 25 30

Lys Pro Cys Leu Leu Thr Ile Ser Ser Cys Ser Leu Thr Gln Ser Pro
 35 40 45

Ala Met Ala Ser Ser Leu Ser Ser Thr Val Lys Gly Arg Leu Phe Thr
 50 55 60

Gln Ala His Lys Thr Leu Asp Tyr His Ser Pro Val Ile Leu Leu Ser
 65 70 75 80

Tyr Cys Ser Leu Leu Tyr Leu Ser Pro Leu Lys Pro Pro Trp Pro Pro
 85 90 95

Pro Ile Leu Val Ser Leu His
 100

<210> 3513

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3513

Met Ser His Arg Ala Trp Pro Thr Ser Ala Leu Leu Asn Leu Ser Ser
 1 5 10 15

Leu Ser Leu Thr Leu Pro Gln Trp Leu Leu Tyr Gln Pro Thr Lys Lys
 20 25 30

Ala Pro Leu Pro Thr Leu Ala Gly Gln Arg Ala His Ser Leu Pro Ser
 35 40 45

His Lys Pro Val Pro His Ala Trp Ala Leu Leu Arg Pro Lys Gln Pro

50	55	60	
Ser Ser Asn Ser Glu Glu Asn Pro Glu Leu Leu Leu Leu Thr Val Val			
65	70	75	80
Ile His Pro Leu Asn Ala Tyr Cys Gly Ser Pro Glu Thr Ile Thr Trp			
85	90	95	
Leu Ala Ser Val Asn Ser His Asn Ser Phe Gln Cys Tyr His Ser Cys			
100	105	110	
Val Cys Pro Leu Leu Pro Trp Leu Ser Pro Arg Tyr Phe Leu Gln Asp			
115	120	125	
Ser Val Pro Ser Leu Val Ser Gly Phe Ser Arg Tyr Leu Pro Met Ala			
130	135	140	
Cys Leu Gly Pro Ala Ser Gly Asn Pro Ala Trp Ile Val Ala Arg Lys			
145	150	155	160
Gly Cys Glu Asp Trp Met Pro Pro Phe Val Phe Val Phe Ser Phe Ile			
165	170	175	
Pro Ser Phe Leu Ser Ser Leu Pro Ser Phe Leu Pro Leu Ser Leu Ser			
180	185	190	
Leu Ser Phe Phe Leu Ser Leu Phe Leu Phe Leu Cys Leu Phe Phe Phe			
195	200	205	
Leu Phe Phe Arg Thr Cys His Pro Gly Trp Ser Ala Val Ala Gln Ser			
210	215	220	
Trp Leu Thr Thr Ile Ser Ala Ser Gln Ile Gln Ala Ile Leu Arg Pro			
225	230	235	240
Gln Pro Pro Lys			

<210> 3514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3514

Met Arg Val Pro Val Leu Tyr Pro Phe Gln His Leu Val Leu Ser Val
 1 5 10 15
 Lys Lys Ile Ile Leu Val Ser Met Gln Trp Tyr Leu Ile Lys Asp Thr
 20 25 30
 Gln Met Ala Asn Lys Gln Met Lys Arg Cys Ser Ile Ser Leu Ala Thr
 35 40 45
 Gly Glu Met Gln Ile Lys Thr Thr Val Arg Tyr His Phe Thr Pro Thr
 50 55 60
 Arg Phe Thr Ile Ile Lys Arg Trp Lys Ile Thr Ser Val Asp Lys Asn
 65 70 75 80
 Leu Glu Lys Met Glu Pro Ser Tyr Thr Ile Gly Gly Asn Val Gly Trp
 85 90 95
 Cys Ser Cys Ser Glu Lys Gln Phe Leu Thr Leu Gly
 100 105

<210> 3515

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3515

Met Glu Ala Arg Pro Pro Pro Glu Arg Gly Ser Leu Lys Ile Ile Leu
 1 5 10 15
 Thr Ser Leu Ser Ser Val Leu Thr Ser Leu Asp Cys Ile Leu Ser Phe

20	25	30
His Leu Arg Ser Ser Trp Phe Trp Leu Ala Ser Ser Asp Ile Thr Pro		
35	40	45
Ala Glu Glu Arg Glu Gly Thr Arg Cys Ile Thr Ala Trp Ser Gln Gly		
50	55	60
Pro Arg Leu Ile Cys Leu His Ser Thr Phe Gln Ser Leu Met Phe Val		
65	70	75
Leu Cys Ile Leu Ser Arg Gly Phe Arg Ser Leu Ser Arg Lys Asn Arg		
85	90	95
Glu Lys Tyr Val Tyr Ser Ser Leu Met Glu Val Glu Phe Ser		
100	105	110

<210> 3516

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3516

1	5	10	15
Met Leu Leu Glu Gly Arg Asp Gly Thr Ser Ile His Leu Val Asn Asn			
20	25	30	
Cys Gly Leu Ser Ser Val Ser Met Pro Ala Thr Val Leu Ser Ser Asp			
35	40	45	
His Thr Ala Val Asn Arg Ile Asp Glu Leu Ser Leu Ser Ser Trp Ser			
50	55	60	
Ser Gln Pro Ser Gly Glu Asp Arg Tyr Ile Gly Asn Lys Phe Leu Ile			
65	70	75	80
Ala Ser Lys Gly Ala Ser Pro Lys Lys His Gln Val Thr Gly Tyr Arg			

Thr Met Trp Asp Gly Pro Gly Arg Val Cys Glu Phe Pro Val Ala Ala
 85 90 95
 Val Thr Asn Tyr His Lys Phe Ser Gly Leu Lys Leu Ile Lys Met Gly
 100 105 110
 Arg Val Gln Trp Leu Met Pro Val Ile Pro Ala Leu
 115 120

<210> 3517

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3517

Met Pro Phe Ala Trp Pro Ala Pro Glu Trp Pro Gln Cys Gly Arg Ala
 1 5 10 15
 Ala Glu Ala Pro Arg His Gln Cys Asp Pro Val Ser Thr Ala Cys Ser
 20 25 30
 Leu Trp Thr Pro Phe Ser Ser His Gly Pro Pro Arg His Ser Ala Pro
 35 40 45
 Gly Pro Ser Ala Phe Pro Gln Leu Ala Leu Trp Lys Cys Gly Gln Gln
 50 55 60
 Cys Phe Gln Ser Pro Ser Ala Trp Val Cys Pro Val Phe Pro Cys Val
 65 70 75 80
 Asp Glu Gly Pro Ala Leu Leu Ala Gly Ala Ala Leu Asp Thr Pro Phe
 85 90 95
 Pro Arg His Ser Pro Gly Leu Ala His Met Gln Leu Arg Ser Arg Gly
 100 105 110
 Met Leu Thr Gln Arg Leu Val Gly Ala Ala Ser Thr Asp Phe Ser Leu

115	120	125
Glu Ser Ser Cys Leu Leu Phe Ile Val Ser Arg Cys Leu Arg Glu Ile		
130	135	140
Pro		
145		

<210> 3518

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3518

Met Phe Lys Lys Asn Gly Ser Phe Arg Asn Asp Lys Leu Phe His Pro

1	5	10	15
---	---	----	----

Ile Thr Pro Asn Thr Cys Gly Ser Asp Ser Ser Leu His Leu Tyr Ile

20	25	30
----	----	----

Leu Tyr Leu His Trp Pro Asp His Pro Arg Thr Thr Tyr Leu Thr Ser

35	40	45
----	----	----

Ala Pro Phe Cys Leu Leu Thr Gln His Ser Leu Ser Leu Ser Phe Ser

50	55	60
----	----	----

Leu Pro Leu Pro Leu Phe Leu Pro Arg Pro Ser Val Thr His Thr His

65	70	75	80
----	----	----	----

Thr His Thr His Thr His Arg Leu His Asn Ala His Arg Asn Val Leu

85	90	95
----	----	----

Ile Pro Phe Val

100

<210> 3519

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3519

Met Gly Gly Arg Ser His Pro Gln Pro Ala Gly Thr Arg Trp Arg Leu

1

5

10

15

Lys Ser Leu Ser Thr Leu Thr Leu Val His Leu Thr Gly Thr Leu Thr

20

25

30

Ser Ile Ser Lys Thr Trp Ser Leu Arg Thr Pro Cys Leu Gln Arg Leu

35

40

45

Leu Ile Ser Ser Arg Val Leu Gly Ile Gln Gly Arg Gly Gln Pro Gly

50

55

60

Trp Thr Gly Ser Trp Glu Gly Val Ser Trp Gln Pro Pro Gly Gln Thr

65

70

75

80

Asp Leu Pro Ala Cys Gln Arg Gln Pro Val Leu Pro Ala Pro Thr Arg

85

90

95

Thr Ser Ser Gln Ala Arg Cys

100

<210> 3520

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3520

Met Arg Ile Leu Val Ile Pro His Leu Gln Gln His Leu Gly Tyr Phe

1	5	10	15
Thr Trp Phe Ile Ile Cys Ile Ser Leu Met Thr Asn Glu Arg His Phe			
20	25	30	
Val Ile Tyr Val Phe Asp Val Tyr Leu Ser Ser Ile Val Lys Cys Leu			
35	40	45	
Phe Lys Ser Phe Asp His Ile Leu Ile Gly Gln Leu Phe Phe Leu Leu			
50	55	60	
Leu Asn Tyr Ser Pro Leu Ser Ile Leu Asn Thr Ile Pro Ser Ser Asp			
65	70	75	80
Met Arg Ser Val Asn Ile Phe Ser Gln Ala Ala Ala Cys Leu Phe Ile			
85	90	95	
Phe Leu Leu Val Tyr Phe Val Lys Phe			
100	105		

<210> 3521

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3521

Met Ser Gly Ser Ser Arg Met Gly Thr Thr Ser Arg Ser Gly Ser

1 5 10 15

Glu Pro Pro Ala Val Arg Pro Ala Lys Ala Arg Val Arg Met Pro Ser

20 25 30

Arg Ser Met Ala Pro Gly Ser Ala Pro Pro Arg Cys Gly Lys Gly Leu

35 40 45

Gly Arg Ala Leu Arg Pro Leu Pro Arg Ser Pro Cys Ser Pro His Ser

50 55 60

Gly Thr Ala Asn Ala Thr Gly Gln Pro Ala Val Pro Arg Lys Glu Ser
 65 70 75 80
 Gln Gly Arg Glu Thr Pro Pro Arg Ala Ala Ser Val His Pro Ala Ala
 85 90 95
 Arg Ala Ser Tyr Leu Cys Leu Ser Lys Gln Ser Ala Pro Trp Glu Leu
 100 105 110
 Lys Tyr Asn Arg Cys Gln Val Gln Gly Arg Arg Phe Ala Ala Glu Asn
 115 120 125

<210> 3522

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3522

Met Tyr Gln Gly Lys Glu Gly Arg Lys Arg Arg Ser Arg Ser Arg Asp
 1 5 10 15
 Ser Gly Glu Leu Gly Leu Ser Pro Ala Ala Val Leu Arg Val Ser Leu
 20 25 30
 Asn Cys Pro Trp Ala Ala Ser Leu Glu Val Leu Lys Gly Ser Leu Glu
 35 40 45
 Gly Asn Lys Trp Pro Leu Cys Val Glu Ala Leu Val Arg Val Tyr Lys
 50 55 60
 Ser Lys Thr Gln Leu Gly Ala Val Ala His Ala Cys Asn Pro Ser Arg
 65 70 75 80
 Gly Arg Gln Ile Thr Trp Gly Gln Glu Phe Glu Thr Ser Leu Ala Asn
 85 90 95
 Val Val Lys Pro Arg Leu Tyr

100

<210> 3523

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3523

Met Ala Trp Ile Pro Leu Phe Leu Gly Leu Leu Ala Tyr Cys Thr Gly

1 5 10 15

Ser Val Ala Ser Tyr Asp Leu Ile Gln Thr Pro Ser Leu Ser Val Ser

20 25 30

Pro Gly Leu Thr Ala Thr Ile Thr Cys Ser Gly Asp Arg Leu Gly Ser

35 40 45

Arg Phe Val Ser Trp Tyr Gln Gln Arg Ser Gly Gln Ser Pro Val Val

50 55 60

Val Leu Phe Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe

65 70 75 80

Ser Gly Ser Asn Ser Gly Asp Thr Ala Thr Leu Asn Ile Thr Gly Ala

85 90 95

Gln Thr Leu Asp Glu Ala His Tyr Tyr Cys Gln Val Trp Asp Ala Asp

100 105 110

Thr Gly Val Ile Phe Gly Gly Thr Lys Leu Thr Val Leu Gly Glu

115 120 125

Thr Leu Cys Val Ile Ser Phe Phe Val Cys Pro Leu Ser Asn Glu Asp

130 135 140

Gln Ser Phe Ser Leu His Ser Arg Pro Asp Arg Gly Pro Leu Ser Ser

145 150 155 160

Leu Leu Arg Pro Ser Ile Gly Ser Pro Arg Arg His Thr His Ser Met

165

170

175

Thr Asp Thr Arg Val Arg Gly Gln Asp Gly Val Ala Tyr

180

185

<210> 3524

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3524

Met Gly Asp Leu Thr Cys Arg Thr Trp Thr Cys Gln His Arg Ser Leu

1

5

10

15

Leu Thr Leu Pro Val Cys Gly Phe Leu Pro Ser Cys Ala Pro Trp Leu

20

25

30

Arg Arg Pro Gly Asn Ser Ser Leu Gly Ile Pro Ala Glu Gln Leu Leu

35

40

45

Gly Leu Gly Tyr Thr Ser Gln Trp Glu Gly Leu Ala Trp Gly Leu Arg

50

55

60

Ala Arg Gly Gly Val Val Gly Gly Val Cys Leu Thr Ser Lys Asn Leu

65

70

75

80

Leu Gln Ile Arg Glu Asn Met Lys Glu Leu Asp Phe Gly Phe Pro Gly

85

90

95

Leu Pro Asp Leu Val Ala Leu Gly Ser Gly Asp Ile Trp Arg Leu Ile

100

105

110

Leu Cys Ser Arg Asp Lys Asn Pro Leu His Ala His Ser Leu Phe Pro

115

120

125

Leu Asn Arg Glu Lys Leu Gly Leu Glu Asp Thr Ala Pro Thr Ser

130

135

140

<210> 3525

<211> 313

<212> PRT

<213> Homo sapiens

<400> 3525

Met Gly Ala Glu Ala Ser Ser Ser Trp Cys Pro Gly Thr Ala Leu Pro

1

5

10

15

Glu Glu Arg Leu Ser Val Lys Arg Ala Ser Glu Ile Ser Gly Phe Leu

20

25

30

Gly Gln Gly Ser Ser Gly Glu Ala Ala Leu Asp Val Leu Thr His Val

35

40

45

Leu Glu Gly Ala Gly Asn Lys Leu Thr Ser Ser Cys Gly Lys Pro Ser

50

55

60

Ser Asn Arg Met Ser Leu Gln Trp Thr Ala Val Ala Thr Phe Leu Tyr

65

70

75

80

Ala Glu Val Phe Val Val Leu Leu Cys Ile Pro Phe Ile Ser Pro

85

90

95

Lys Arg Trp Gln Lys Ile Phe Lys Ser Arg Leu Val Glu Leu Leu Val

100

105

110

Ser Tyr Gly Asn Thr Phe Phe Val Val Leu Ile Val Ile Leu Val Leu

115

120

125

Leu Val Ile Asp Ala Val Arg Glu Ile Arg Lys Tyr Asp Asp Val Thr

130

135

140

Glu Lys Val Asn Leu Gln Asn Asn Pro Gly Ala Met Glu His Phe His

145

150

155

160

Met Lys Leu Phe Arg Ala Gln Arg Asn Leu Tyr Ile Ala Gly Phe Ser
 165 170 175
 Leu Leu Leu Ser Phe Leu Leu Arg Arg Leu Val Thr Leu Ile Ser Gln
 180 185 190
 Gln Ala Thr Leu Leu Ala Ser Asn Glu Ala Phe Lys Lys Gln Ala Glu
 195 200 205
 Ser Ala Ser Glu Ala Ala Lys Lys Tyr Met Glu Glu Asn Asp Gln Leu
 210 215 220
 Lys Lys Gly Ala Ala Val Asp Gly Gly Lys Leu Asp Val Gly Asn Ala
 225 230 235 240
 Glu Val Lys Leu Glu Glu Asn Arg Ser Leu Lys Ala Asp Leu Gln
 245 250 255
 Lys Leu Lys Asp Glu Leu Ala Ser Thr Lys Gln Lys Leu Glu Lys Ala
 260 265 270
 Glu Asn Gln Val Leu Ala Met Arg Lys Gln Ser Glu Gly Leu Thr Lys
 275 280 285
 Glu Tyr Asp Arg Leu Leu Glu Glu His Ala Lys Leu Gln Ala Ala Val
 290 295 300
 Asp Gly Pro Met Asp Lys Lys Glu Glu
 305 310

<210> 3526

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3526

Met Glu Pro Ala Leu Arg Trp Arg Thr Gln Thr Leu Ser Leu Lys Gly

1	5	10	15
Arg Arg Arg Thr Gly Asn Ser Trp Ala His Pro Arg Asp Lys Arg His			
20	25	30	
Arg Leu Asn Ile Ser Pro Pro Ser Pro Thr Asn Leu Pro Arg Arg			
35	40	45	
Pro Ala Pro Thr Pro Pro Arg Pro Asp Pro Pro Leu Ala Val Gly			
50	55	60	
Val Thr Gln Gly Gln Arg Leu Arg Val Pro Gly Asp Lys Val Gly His			
65	70	75	80
Ser Ser Ser Leu His Pro Gly Pro Arg Asn Thr His Gln Arg Thr Ala			
85	90	95	
Val Arg Gly Arg Thr Arg Ala Cys Val Cys Val Cys Val Cys Val Arg			
100	105	110	
Ala Arg Ala Arg Ala His Thr Gly Gln Gly Ser Leu Ile Arg Asn Ala			
115	120	125	
Gly Gly Thr Ser Ser Val Ser Asp Phe Arg Phe Phe His Ile Ser Glu			
130	135	140	
Cys Leu His Tyr Ile Val Ser			
145	150		

<210> 3527

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3527

Met Cys Val Trp Arg Leu Ile Leu Asp Ala Val Asp Gly Arg Glu Cys

1	5	10	15
---	---	----	----

His His Leu Val His Cys Tyr Met Pro Gln Glu Ile Ile Ala Gln Pro
 20 25 30
 Phe Leu Asn Phe Lys Val Phe Leu Phe Asn Arg Phe Cys Thr Asp Cys
 35 40 45
 Lys Asn Lys Val Leu Arg Ala Tyr Asn Ile Leu Ile Gly Glu Leu Asp
 50 55 60
 Cys Ser Lys Glu Lys Gly Tyr Cys Ala Ala Leu Tyr Glu Gly Leu Arg
 65 70 75 80
 Cys Cys Pro His Glu Arg His Ile His Val Cys Cys Glu Thr Asp Phe
 85 90 95
 Ile Ala His Leu Leu Gly Arg Ala Glu Pro Glu Phe Ala Gly Gly Arg
 100 105 110
 Arg Glu Arg His Ala Lys Thr Ile Asp Ile Ala Gln Glu Glu Val Leu
 115 120 125
 Thr Cys Leu Gly Ile His Leu Tyr Glu Arg Leu His Arg Ile Trp Gln
 130 135 140
 Lys Leu Arg Ala Glu Glu Gln Thr Trp Gln Met Leu Phe Tyr Leu Gly
 145 150 155 160
 Val Asp Ala Leu Arg Lys Ser Phe Glu Met Thr Val Glu Lys Val Gln
 165 170 175
 Gly Ile Ser Arg Leu Glu Gln Leu Cys Glu Glu Phe Ser Glu Glu Glu
 180 185 190
 Arg Val Arg Glu Leu Lys Gln Glu Lys Lys Arg Gln Lys Arg Lys Asn
 195 200 205
 Arg Arg Lys Asn Lys Cys Val Cys Asp Ile Pro Thr Pro Leu Gln Thr
 210 215 220
 Ala Asp Glu Lys Glu Val Ser Gln Glu Lys Glu Thr Asp Phe Ile Glu
 225 230 235 240
 Asn Ser Ser Cys Lys Ala Cys Gly Ser Thr Glu Asp Gly Asn Thr Cys

245	250	255
Val Glu Val Ile Val Thr Asn Glu Asn Thr Ser Cys Thr Cys Pro Ser		
260	265	270
Ser Gly Asn Leu Leu Gly Ser Pro Lys Ile Lys Lys Gly Leu Ser Pro		
275	280	285
His Cys Asn Gly Ser Asp Cys Gly Tyr Ser Ser Met Glu Gly Ser		
290	295	300
Glu Thr Gly Ser Arg Glu Gly Ser Asp Val Ala Cys Thr Glu Gly Ile		
305	310	315
Cys Asn His Asp Glu His Gly Asp Asp Ser Cys Val His His Cys Glu		
325	330	335
Asp Lys Glu Asp Asp Gly Asp Ser Cys Val Glu Cys Trp Ala Asn Ser		
340	345	350
Glu Glu Asn Asp Thr Lys Gly Lys Asn		
355	360	

<210> 3528

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3528

Met Arg Pro Gln Ser Phe Arg Ser Arg Pro Trp Gly Val Arg Ala Pro

1 5 10 15

Pro Gly Asn Thr Val Arg Pro Gln Arg Leu Gln Pro Lys Leu Ala Arg

20 25 30

Ser Met Gly Gln Val Pro Leu Cys Leu Glu Lys Pro Gly Ala Leu Leu

35 40 45

Pro Cys Pro Pro Glu Pro Thr Ala Gly Arg Thr Pro Pro Ala Pro Pro
 50 55 60

His Pro Val Ala Arg Asp Pro Ser Glu Asn Ser Glu Ala Gly Pro Arg
 65 70 75 80

Ala Val Pro Ala Gly Ala Arg Pro Val Gly Arg Thr Gln Pro Arg Asn
 85 90 95

Gln Leu Pro Glu Thr Arg Val Pro Leu Gly Cys Pro Pro Ala Trp Arg
 100 105 110

Arg Pro Gln Ala Arg Ser His Pro Phe Pro Glu Leu Gln Asp Arg Ala
 115 120 125

Ser Ser
 130

<210> 3529

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3529

Met Gly Ile Cys Phe Glu Glu Lys Ser Cys Lys Cys Phe Cys Leu Ile
 1 5 10 15

Phe Ile Ala Leu Gly Met Val Pro Pro Pro Glu Asn Val Arg Met Asn
 20 25 30

Ser Val Asn Phe Lys Asn Ile Leu Gln Trp Glu Ser Pro Ala Phe Ala
 35 40 45

Glu Gly Asn Leu Thr Phe Thr Ala Gln Tyr Leu Ser Tyr Arg Ile Phe
 50 55 60

Gln Asp Lys Cys Met Asn Thr Thr Leu Thr Glu Cys Asp Phe Ser Ser

65	70	75	80
Leu Ser Lys Tyr Gly Asp His Thr Leu Arg Val Arg Ala Glu Phe Ala			
85	90	95	
Asp Glu His Ser Asp Trp Val Asn Ile Thr Phe Cys Pro Val Asp Asp			
100	105	110	
Thr Ile Ile Gly Pro Pro Gly Met Gln Val Glu Val Leu Ala Asp Ser			
115	120	125	
Leu His Met Arg Phe Leu Ala Pro Lys Ile Glu Asn Glu Tyr Glu Thr			
130	135	140	
Trp Thr Met Lys Asn Val Tyr Asn Ser Trp Thr Tyr Asn Val Gln Tyr			
145	150	155	160
Trp Lys Asn Gly Thr Asp Glu Lys Phe Gln Ile Thr Pro Gln Tyr Asp			
165	170	175	
Phe Glu Val Leu Arg Asn Leu Glu Pro Trp Thr Thr Tyr Cys Val Gln			
180	185	190	
Val Arg Gly Phe Leu Pro Asp Arg Asn Lys Ala Gly Glu Trp Ser Glu			
195	200	205	
Pro Val Cys Glu Gln Thr Thr His Asp Glu Thr Val Pro Ser Trp Met			
210	215	220	
Val Ala Val Ile Leu Met Ala Ser Val Phe Met Val Cys Leu Ala Leu			
225	230	235	240
Leu Gly Cys Phe Ala Leu Leu Trp Cys Val Tyr Lys Lys Thr Lys Tyr			
245	250	255	
Ala Phe Ser Pro Arg Asn Ser Leu Pro Gln His Leu Lys Glu Phe Leu			
260	265	270	
Gly His Pro His His Asn Thr Leu Leu Phe Phe Ser Phe Pro Leu Ser			
275	280	285	
Asp Glu Asn Asp Val Phe Asp Lys Leu Ser Val Ile Ala Glu Asp Ser			
290	295	300	

Glu Ser Gly Lys Gln Asn Pro Gly Asp Ser Cys Ser Leu Gly Thr Pro
 305 310 315 320
 Pro Gly Gln Gly Pro Gln Ser
 325

<210> 3530

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3530

Met Leu Glu Lys Gly Ala Leu Asp Leu Ala Thr Ser Gly Leu Cys Thr
 1 5 10 15

Pro Gly Ala Glu Gly Thr Gln Gly Cys Thr Tyr Thr Leu Lys Ala Thr
 20 25 30

Val Arg Thr Gly Glu Gln Gly Gln Arg Ala Met Glu Ser Pro Ala Glu
 35 40 45

Gly Cys Thr Ser Arg Leu Lys Arg Ala Leu Pro Ala Ser Ala Arg Lys
 50 55 60

Pro Gly Leu Trp Gly Cys Val Ile Val Asp Asp His Phe Gln Val Met
 65 70 75 80

Ala Thr Ala Pro Val Leu Val Thr Ala Gly Pro Pro Ile Leu Leu Arg
 85 90 95

His Pro Pro Leu Ser His Arg Ala Val Phe Arg Ala Ser Ala Gly Leu
 100 105 110

Ser Cys Cys Ser Gln Thr Leu Ala Leu Arg Lys Ala Gly Gln Ser Thr
 115 120 125

Ser Cys Ser Leu Arg Gly Gly Gln Val Phe Val Ser Lys Gly Gly Lys

130	135	140	
Pro Gly Glu Arg Arg His Gln Ala Pro Glu Thr Phe Glu Met Thr Ser			
145	150	155	160
Glu Asp Pro Gly Pro Leu Arg Val Thr Thr Ser Asp Ser Cys Leu Pro			
165	170	175	
Gln Ala Val Thr Asp Val			
180			

<210> 3531

<211> 430

<212> PRT

<213> Homo sapiens

<400> 3531

Met Phe Asp Gly Tyr Asp Ser Cys Ser Glu Asp Thr Ser Ser Ser Ser			
1	5	10	15
Ser Ser Glu Glu Ser Glu Glu Val Ala Pro Leu Pro Ser Asn Leu			
20	25	30	
Pro Ile Ile Lys Asn Asn Gly Gln Val Tyr Thr Tyr Pro Asp Gly Lys			
35	40	45	
Ser Gly Met Ala Thr Cys Glu Met Cys Gly Met Val Gly Val Arg Asp			
50	55	60	
Ala Phe Tyr Ser Lys Thr Lys Arg Phe Cys Ser Val Ser Cys Ser Arg			
65	70	75	80
Ser Tyr Ser Ser Asn Ser Lys Lys Ala Ser Ile Leu Ala Arg Leu Gln			
85	90	95	
Gly Lys Pro Pro Thr Lys Lys Ala Lys Val Leu Gln Lys Gln Pro Leu			
100	105	110	

Val Ala Lys Leu Ala Ala Tyr Ala Gln Tyr Gln Ala Thr Leu Gln Asn
 115 120 125
 Gln Ala Lys Thr Lys Ala Ala Val Ser Met Glu Gly Phe Ser Trp Gly
 130 135 140
 Asn Tyr Ile Asn Ser Asn Ser Phe Ile Ala Ala Pro Val Thr Cys Phe
 145 150 155 160
 Lys His Ala Pro Met Gly Thr Cys Trp Gly Asp Ile Ser Glu Asn Val
 165 170 175
 Arg Val Glu Val Pro Asn Thr Asp Cys Ser Leu Pro Thr Lys Val Phe
 180 185 190
 Trp Ile Ala Gly Ile Val Lys Leu Ala Gly Tyr Asn Ala Leu Leu Arg
 195 200 205
 Tyr Glu Gly Phe Glu Asn Asp Ser Gly Leu Asp Phe Trp Cys Asn Ile
 210 215 220
 Cys Gly Ser Asp Ile His Pro Val Gly Trp Cys Ala Ala Ser Gly Lys
 225 230 235 240
 Pro Leu Val Pro Pro Arg Thr Ile Gln His Lys Tyr Thr Asn Trp Lys
 245 250 255
 Ala Phe Leu Val Lys Arg Leu Thr Gly Ala Lys Thr Leu Pro Pro Asp
 260 265 270
 Phe Ser Gln Lys Val Ser Glu Ser Met Gln Tyr Pro Phe Lys Pro Cys
 275 280 285
 Met Arg Val Glu Val Val Asp Lys Arg His Leu Cys Arg Thr Arg Val
 290 295 300
 Ala Val Val Glu Ser Val Ile Gly Gly Arg Leu Arg Leu Val Tyr Glu
 305 310 315 320
 Glu Ser Glu Asp Arg Thr Asp Asp Phe Trp Cys His Met His Ser Pro
 325 330 335
 Leu Ile His His Ile Gly Trp Ser Arg Ser Ile Gly His Arg Phe Lys

340	345	350
Arg Ser Asp Ile Thr Lys Lys Gln Asp Gly His Phe Asp Thr Pro Pro		
355	360	365
His Leu Phe Ala Lys Val Lys Glu Val Asp Gln Ser Gly Glu Trp Phe		
370	375	380
Lys Glu Gly Met Lys Leu Glu Ala Ile Asp Pro Leu Asn Leu Ser Thr		
385	390	395
Ile Cys Val Ala Thr Ile Arg Lys Val Thr Gln Asn Phe Leu Leu Asn		
405	410	415
Gly Leu Thr Thr Ser Gly Lys Leu Ala Pro Leu Gln His Gln		
420	425	430

<210> 3532

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3532

Met Val Glu Gly Arg Arg Ala Leu Leu Gly Ala Trp Glu Ala Gly Phe			
1	5	10	15
Arg Ala Ala Trp Ala Val Pro Pro Glu Gly Gln Asp Pro Thr Gly Gly			
20	25	30	
Ala Arg Ala Ala Thr Pro Gln Thr Asn Glu Phe Lys Gly Ala Thr Glu			
35	40	45	
Glu Ala Pro Ala Lys Glu Ser Pro His Thr Gly Glu Phe Lys Gly Ala			
50	55	60	
Ala Leu Val Ser Pro Ile Ser Lys Arg Met Leu Glu Arg Leu Ser Lys			
65	70	75	80

Phe Glu Val Gly Asp Ala Glu Asn Val Ala Ser Tyr Glu Leu Phe Gly
 85 90 95
 Val Phe Leu Val Leu Leu Asp Val Thr Leu Val Leu Ala Asp Leu Ile
 100 105 110
 Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser
 115 120 125
 Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe
 130 135 140
 Val Glu Gly Phe
 145

<210> 3533

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3533

Met His Ala Cys Val Asn Thr Pro Gly Ser Tyr Arg Cys Thr Cys Pro
 1 5 10 15
 Gly Gly Tyr Arg Thr Leu Ala Asp Gly Lys Ser Cys Glu Asp Val Asp
 20 25 30
 Glu Cys Val Gly Leu Gln Pro Val Cys Pro Gln Gly Thr Thr Cys Ile
 35 40 45
 Asn Thr Gly Gly Ser Phe Gln Cys Val Ser Pro Glu Cys Pro Glu Gly
 50 55 60
 Ser Gly Asn Val Ser Tyr Val Lys Thr Ser Pro Phe Gln Cys Glu Arg
 65 70 75 80
 Asn Pro Cys Pro Met Asp Ser Arg Pro Cys Arg His Leu Pro Lys Thr

85	90	95
Ile Ser Phe His Tyr Leu Ser Leu Pro Ser Asn Leu Lys Thr Pro Ile		
100	105	110
Thr Leu Phe Arg Met Ala Thr Ala Ser Ala Pro Gly Arg Ala Gly Pro		
115	120	125
Asn Ser Leu Arg Phe Gly Ile Val Gly Gly Asn Ser Arg Gly His Phe		
130	135	140
Val Met Gln Arg Ser Asp Arg Gln Thr Gly Asp Leu Ile Leu Val Gln		
145	150	155
Asn Leu Glu Gly Pro Gln Thr Leu Glu Val Asp Val Asp Met Ser Glu		
165	170	175
Tyr Leu Asp Arg Ser Phe Gln Ala Asn His Val Ser Lys Val Thr Ile		
180	185	190
Phe Val Ser Pro Tyr Asp Phe		
195		

<210> 3534

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3534

Met Ile Leu Leu Glu Thr Arg Pro Ala Ser Thr Cys Pro Pro Trp Ser

1 5 10 15

Gln Glu Ala Leu Glu Glu Lys Cys Ser Ile Leu Asp Asp Phe Pro Arg

20 25 30

Pro Leu Cys Cys Gln Gln Trp Arg His Pro Glu Leu Ala Glu Val Gly

35 40 45

Thr Ser Tyr Leu Lys Pro Asn Lys Cys Ser Pro Ser Gly Pro Asn Pro
 50 55 60
 Gln Cys Leu Ala Leu Cys Leu Leu Ala Leu Ala Leu Thr Ile Gly Ala
 65 70 75 80
 Ile His Thr Ala Ile Leu Glu Gly Arg Gly His Ser Pro Ser Ser Lys
 85 90 95
 Lys Glu Asp Gly
 100

<210> 3535

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3535

Met Ser Met Met Ser Ser Arg Lys Thr Met Lys Ala Thr Ile Pro Pro
 1 5 10 15
 Met Met Ala Cys Pro Ala His Leu Arg Ile Phe Leu Glu Glu Asp Ala
 20 25 30
 Val Ala Pro Ser Thr Thr Arg Arg Gln His Trp Lys Gln Thr Gln Ser
 35 40 45
 Asn Arg Thr Pro Ser Ala Trp Leu Leu Ser Thr Lys Gln Arg Gly Asp
 50 55 60
 Gln Gln Asp Thr Asn His Lys Gly Thr Arg Thr Phe Ser His Cys Gln
 65 70 75 80
 Ser Ser Ser Asp Trp Ser Gly Glu Ile Trp Gly Gln Arg Pro Glu Leu
 85 90 95
 Ser Ala Leu Ser Leu Leu Leu Ala Ser Tyr Asn Ser Leu Val Val Leu

100	105	110
Arg Gln Leu Pro His Ala Glu Val Cys Pro Trp Ser Gly Asn His Pro		
115	120	125
Ser Arg His Ser Asp Pro Lys Asn Ser Asp Leu Leu Ser Leu Gly Gly		
130	135	140
Leu Ala Leu Ile Pro Ser Thr Val Leu Met Ser Val Ser Ser Lys Gly		
145	150	155
Ala Ser Asp Val Ser Pro Thr Met His Phe Pro Tyr Ser Glu Lys Arg		
165	170	175

<210> 3536

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3536

Met Asp Ser Ala Pro Ala Gly Ser Phe Ser Ala Ser Ser Phe Phe Asp		
1	5	10
Leu Ser Val Thr Val Thr Arg Ala Lys Asn Ser Arg Gly Pro Ser Ser		
20	25	30
Ser Pro Ser Glu Leu Gln Gly Ala His Cys Leu Thr Ser Ser Leu Ala		
35	40	45
Ala Ala Cys Ser Val Ala Tyr Ser Ala Leu Trp Ser Ser Ser Pro Leu		
50	55	60
Arg Ser Pro Trp Ser Ile Ser Ser Ile Thr Met Pro Arg Leu Ser Ser		
65	70	75
Glu Glu Ser Ser Ala Ser Leu Leu Ala Gly Ala Asp Gly Arg Pro Pro		
85	90	95

Arg Leu Leu Phe Leu Pro Phe Trp Val Asn Leu Leu Arg Leu Val Leu
 100 105 110
 Phe Leu Arg Pro Arg Arg Pro Leu Leu Gly Phe Leu Ala Ala Pro Arg
 115 120 125
 Ser Glu Pro Ala Cys Pro Val Thr Ser Pro Glu Ser Trp Ala Cys Val
 130 135 140
 Ser Glu Ala Gly Gly Val Gly Ala Ser Pro Gly Val Pro Ala Ser Ala
 145 150 155 160
 Ala Cys Val Gly Pro Ser Ser Ser Arg Arg Leu Ile Cys Leu Arg
 165 170 175
 Thr Leu Val Ser Cys Ala Arg Ser Phe His Arg Thr Leu Gln Thr Pro
 180 185 190
 Ser Leu Pro Gly Ile Ser Leu Gly Met Ala Ala
 195 200

<210> 3537

<211> 536

<212> PRT

<213> Homo sapiens

<400> 3537

Met Ser Ala Arg Val Pro Val Ser Phe Cys Ile Tyr Ile His Ala Cys
 1 5 10 15
 Val Pro Val Phe Leu Arg Val Leu Val Cys Ala Arg Val His Leu Cys
 20 25 30
 Val Cys Gln Ser Met Cys Ala Cys Val Cys Leu Ser Ala Tyr Pro Cys
 35 40 45
 Val His Val Cys Val Cys Gln Arg Ile Arg Val Cys Met Cys Val Ser